THE MARINE RECORD.

DEVOTED TO COMMERCE, ENGINEERING AND SCIENCE.

VOL. VI. NO. 22. CLEVELAND, O., MAY 29, 1884 $2.00 PER ANNUM SINGLE COPIES 5 CENTS

AROUND THE LAKES.

CLEVELAND.

River tugs Champaign, Gladiator, Wilcox and John Martin were in port Monday.

The schooner King Sisters loads coal at Toledo for Portage at 80c. and ore back at $1.10.

The tug American Eagle was inspected on Friday. The test was 160 pounds, cold water pressure, and it took two tugs to make it.

The schooner C. H. Johnson, Captain C. Wallace, owned by Palmer and Benham while at anchor in the Sault river was run into by the Goshawk and lost her jibboom.

The tug Sampson, with her tow, arrived at Port Arthur on Sunday, the Johnson with coal from Ashtabula, the Queen City with coal from Buffalo, and the Goshawk with coal from Charlotte.

Captain Wm. Pringle master of the tug Goodnow with the barge King, Kingfisher and Frank Perew has arrived from Escanaba, his first round trip as master. He has made good time and given good satisfaction.

It is said the Republic Iron Company have introduced a new feature on their boats. Every vessel is provided with a small but select library, consisting of interesting works of fiction, travels, history, etc. These are for the use of the crew, and cannot fail to have a good effect.

The poor facilities for handling coal at Port Arthur is a serious drawback to its prosperity. A large amount of tonnage has been lying at that port for a week on this account and will probably not get a chance to discharge before the first of June. Several vessels bound there with coal have been directed to proceed to Duluth with their cargoes.

Beginning Friday, June 6th, the handsome steamer Atlantic, of Grummond's Macinac line, will extend the regular trip to Macinac and St. Ignace, on to Petoskey, Harbor Springs and Charlevoix, leaving the Cleveland Forwarding Company's wharf, foot of Superior street, at 8 o'clock p. m.

The propeller H. B. Tuttle was in Globe drydock on Tuesday getting a new rudder a new plank on her bottom, a patch on her wheel, some calking and minor repairs. The tug J. R. Worswick was also in Tuesday for a new wheel and some calking. The Charles Wall went in Wednesday to have a leak stopped.

V. D. Nickerson left yesterday morning for Chagrin river with Captain Robert Greenhalgh's tug Bolton to bring to the city S. V. Harkness' steam yacht Twilight. She sunk in the boat house during the flood this spring and when she arrives here will be thoroughly cleaned out and repaired. Her forward cabin will be altered some.

The barge H. P. Baldwin has been transformed into a schooner once more. After her experience ashore off Erie street in the winter of 1881 she was converted into a barge and made a good business last season for her owners the Messrs. Smith under their contract on the breakwater. She has been thoroughly overhauled and recalked throughout and repainted; given a new centerboard box and a new cabin. But perhaps the largest improvement is the taking out of the one spar she had in her and giving her again in her history the schooner rig, a fore, a main and a mizzen mast. She will receive her outfit from Mr. Gallagher's loft, which will include wire rigging. The Baldwin will load coal for Portage and go in tow of the Sprague.

V. D. Nickerson, marine artist, now has on exhibition in his studio two spirited night scenes with mosaic lights, the subjects being the river tug's Gladiator and M. Swain. The swain goes to Captain E. Tormey and the Gladiator to Detroit parties. He also has under way the steamship Kasota and tug Sweepstakes both of which have been ordered by Captain Inman.

Three times and out. While the tug Fanny Tuthill was going up the river last Friday with the schooner John Jewett in tow the schooner thrust her anchor through the Tuthill's side. She took water, freely but managed to reach the slip near Smith's drydock, where she sunk. A diver placed a canvas jacket over the hole and she was raised and pumped out.

The schooner Shawnee went on Smith's drydock yesterday.

A change should be made in the light on the east end of the breakwater.

Coal rates are improving somewhat and there is a steady demand for tonnage.

Charters were reported Tuesday of the schooner Maria Martin, coal, Toledo to Racine, 80c; schooner Champion, coal, Cleveland to Milwaukee, 70c; schooner H. A. Kent, coal, Buffalo to Milwaukee, 80c; Sunrise, ore, Escanaba to Buffalo, p. t. On Wednesday steambarge Oregon, lumber, from Baraga to Chicago, $2.25 per M; Pulaska, ore, Escanaba to Cleveland, 85c; the schooner Louisa, coal, Cleveland to Detroit, 35c; Kittie M. Forbes, coal, Erie to Chicago, 80c; Reed Case, pig iron, St. Ignace to Erie, $1; W. H. Rounds, pig iron, St. Ignace to Erie, p. t.

DETROIT.

Special to the Marine Record.

DETROIT, May 27.

An effort was made a day or two since by the United States Marshal at this port, to sell at auction the schooner Babireau & Gaudrey, which has not been fitted out thus far this season. As no one would bid above $170, the sale was further postponed. She was built at Three Rivers in 1866, and is 150 tons burden. The object of the sale is to obtain a clear title to the vessel.

It is now announced in the Detroit papers that H. W. Granger, United States inspector of boilers at this port, has resigned that position to assume the management of a manufacturing company.

The barge Mary Stockton, which met with disaster on Lake Erie, was another of the old relics of by-gone days, having been built at Sheboygan, on Lake Michigan, in 1852, and registers 347 tons burden. In early timea she was looked upon as one of the finest barkentines on the lakes. She was gotten safely into port.

The new steamer Energy, built at Wallaceburg, Ont., to ply between that place and Detroit, has made her appearance here and will soon commence her regular trips, making three trips per week. She is 81 feet long, 20 feet beam and 6 feet depth of hold.

The propeller Wm. M. Alderson, Captain David Foster, arrived at Windsor on Saturday from Port Dover, Lake Erie, and it is stated will ply between Detroit and Chatham, making daily trips. She is 98 tons burden and can carry safely 200 excursionists. She is a well gotten up craft and will doubtless receive a liberal patronage, notwithstanding there is one boat already on the route.

The new steamships which recently went to Owen Sound to ply from there to Lake Superior, are credited with making better time than all others running from that port, even surpassing the far-famed Campana, which, heretofore, was considered the champion for speed.

The schooner Hartford left Wednesday with wheat for Oswego from this port, lacking 1,000 bushels of a full cargo.

The tug Michigan has been dismantled and her machinery placed in the tug Pringle. The Michigan has something of a history. She was built at Point Edward, on the river St. Clair, in 1859, for the Grand Trunk railway, to ply as a steam ferry, and cost $26,000; burthen, 456 tons. After being sold by the company, she towed for a while on the lakes and rivers. Latterly she has been used for wrecking, and answered well for that purpose.

The steamer Algomah, which had such a routine of mishaps during the winter in the Straits of Mackinaw, has finally been brought here to be strengthened up. Her shaft is to be straightened, and other attentions are necessary which could not be carried out at the above place.

A new tug named the C. W. Wells, built at Marine City, has been towed to this city for her machinery. Length, 70 feet; beam, 14½ feet; hold, 7½ feet; cost, $8,000. Captain Thos. M. Hubbell, of this city, is the owner.

A report has been in circulation that the Canadian propeller Prussia had sunk in Lake Superior, but at this writing it needs confirmation. The propeller China came down on Saturday night, but had no intelligence to that end.

Lying at a wharf to-day was the barge Genessee Chief, formerly a propeller, built at at Genessee, on Lake Ontario, 38 years ago, and at that period was a boat of handsome finish and design. She is yet as straight as an arrow and will probably hold together for several years more. The endurance of some of these old settlers is wonderful.

A heavy fog prevailed last night on Lake Huron and in the rivers. A large fleet of steam and sail craft were compelled to anchor outside of the river St. Clair and the steambarge R. J. Hackett and consort had to lay at anchor above the Limekiln. There have been no reports of accidents arising therefrom. Sailors prefer a gale of wind to a fog.

The schoonor Benedict, which stranded at Bear Rump Island, in Georgian Bay, it is thought may yet be saved. Her captain has received instructions to douse the cargo overboard, if there are no other means of disposing of it.

There are decidedly too many harbor tugs at this port, and those who were so keen to come on in opposition to the old line are beginning to find it out, as several are lying idle a greater part of the time. All preach the same gospel and all stick closely to the same text, yet this does not meet expenses.

The conversion of sail craft into towbarges is almost of daily occurrence, and the time not far distant when the last of what was once the pride and ornamentation of the lakes will have disappeared, supplanted by steambarges and sparless hulks bereft of their former attractions. The schooner Grace Murray was thus disposed of a few days since at this port.

Captain John Varner, of your city, and for several years Cleveland's harbor master, has arrived in this city and met with many of his old shipmates and friends. He is a true sailor of the olden time and generous to a fault.

John Demass has bought the centrifugal pump in this city, and is fitting it up for wrecking purposes.

The tugs I. U. Master and Stranger were disposed of at auction yesterday. The former was purchased by S. A. Murphy, the latter by Captain Hiram Ives, the prices respectively being $3,985 and $3,825. They belonged to the H. N. Strong estate. Both went at low figures.

There is but little change in lake freights. Staves are shipped from Detroit to Buffalo at last quotations, $4, $6, and $8. Wheat to Ogdensburg at 4½c, to Oswego at 4c, and to Buffalo at 2c per bushel. The following charters were reported Monday in Detroit: Schooner George Sherman, coal, Cleveland to St. Ignace, 65c per ton: H. Dudley, coal, Lorain to Goderich, 60c per ton, and wood and cedar from Golden Valley to Detroit, $2 per cord; Flat Wing, hardened lumber, East Jordon to Detroit, private terms; scow Charlie Crawford and steambarge W. P. Thew, lumber, Port Crescent to Cleveland, $1.50 per M; scow Alvina, dry lumber, Prentiss Bay to Detroit, $1.75 per M.

The Detroit river is sufficiently broad and navigable for all practical purposes, yet it will not do to dump any refuse in this beautiful stream any more than it would be allowable in Cleveland harbor. For such an offense the captain of a tug and the owner of a dredge were fined $5 each. It was paid in both instances. J. W. H.

MARQUETTE.

The barge Potts is at Marquette with her engines wrecked, both cylinder heads having blown out and other parts broken. She had been laying helpless in the ice outside Marquette for three days, until picked up by the barge Smith Moore, on Saturday morning. She will be towed to Detroit, where she is owned by F. Nester. She was bound for Lake Linden with coal.

The schooner Lotus which was in collision with the schooner Maxwell off Racine last week, completed repairs, and sailed for Marquette.

PORT HURON.

Special to the Marine Record.

The schooner Two Fannies was run into by the steambarge Tecumseh, which was coming into the river during a heavy fog. The Two Fannies lost her bowsprit, headgear, jibboom and cutwater. There is no damage to the Tecumseh. Everything stopped on account of the fog.

Mr. Coe, United States local inspector of steamboats at Port Huron, gave license to a Canadian engineer for the steamer Evening Star, plying between Detroit and Toledo, and the fact coming to the knowledge of the engineers of Port Huron, they took steps to defeat the action by applying to a lawyer, who referred them to the United States Prosecuting Attorney, with the information that they had a good case as the inspector had laid himself liable. They afterward called on Mr. Coe and explained to him that they considered he had done the American engineers an injustice in making this appointment and desired him to withdraw the license, stating the result of their conference with the lawyer. Mr. Coe, after

[*Continued on 4th page.*]

MARINE LAW.

COLLISION.

U. S. Dist. Court, South. Dist. New York.

Jesse Carll et al. vs. the schooner Erastus Wiman.—Robert E. Smith et al. vs the same.—Martha W. Hallock, as administratrix, vs. Theodore T. Anderson.—Theodore T. Anderson and others vs. Jesse Carll and others.—*In re* Carll, petitioner.

Scudder & Carter; Geo. A. Black, for Carll, etc. Benedict, Taft & Benedict, for the Wyman. Brown, J.

The above five cases grew out of a collision, which happened in Long Island Sound near Little Gull Island, at about 11 o'clock of the night of October 26, 1881 between the schooner P. H. Wheaton, bound to the eastward, and the schooner Erastus Wiman, bound westward, whereby the former was immediately sunk. The captain of the Wheaton was knocked overboard by the collision and drowned. The third libel above named was brought by his administratrix to recover damages on account of his death.

The two libels first named were brought by the owners of the Wheaton and her cargo respectively; the fourth was brought by the owners of the Wyman to recover their damages, and the fifth is a proceeding by the owners of the Wheaton to limit their liability.

During the day preceding the collision it had been blowing a gale from the northwest, and the Wyman had been at anchor in the Sound. She was a three-masted, centreboard schooner, of 597 tons register. At about 6 p. m., the gale having somewhat abated, she resumed her voyage to the westward and about 11 o'clock was near Little Gull Island and Fisher's Island. The wind was blowing fresh from the northwest, slightly variable, and the sea was rough. Some ten or fifteen minutes before the collision, the Wyman had made a short tack to the northward, and was then put upon her course, W.½S., sailing close hauled, full and by.

The Wheaton was a three-masted schooner of 242 tons register, and was sailing probably on a course of about E. or E. by S. The only persons on deck at the time of the collision were her captain and the wheelsman. The captain stood by the wheel and was the only lookout; she had no lookout forward. The wheelsman died before the case was tried, and his evidence was not taken. The other three who composed the crew were below, and did not come on deck until after the collision. The Wheaton had been sailing during the afternoon and evening in company with the schooner Witch Hazel, which was about half a mile ahead of the former. No direct evidence of importance being obtainable from those on board the Wheaton, the principal evidence on her part is from the captain of the Witch Hazel.

The contention of the libelants is, that the Wheaton was considerably to leeward of the Witch Hazel; that when the captain of the latter observed the two colored lights of the Wyman, and that the two vessels were approaching each other nearly head and head, he starboarded his wheel in order to pass to windward; and that had the Wyman kept her course, she would have passed easily between the Witch Hazel and the Wheaton, namely, to leeward of the former; but that just before reaching the Witch Hazel, the Wiman luffed up into the wind, crossing the bows of the Witch Hazel, and compelling the latter to pass to the leeward of the Wiman under a sudden port wheel; and that the Wiman, by this luff, came up into the wind, so that her sails shook, her headway was lost, and in getting upon her course again, she paid off so much to leeward as to run into the Wheaton.

The captain of the Witch Hazel, in substance, gives this account of the matter. He says that he first saw the two colored lights of the Wiman about a half point on his starboard bow, a half mile or more ahead; that his previous course was E. by S.½S.; that he then put his vessel to port a point and a half, so that she was sailing about E, but as he found that the Wiman was coming too close to him, he put his vessel to port another half point; and that very shortly afterward the red light of the Wiman was shut in, and she shot across his bows with her sails shaking; that he immediately ported, and passed within a few feet of her to leeward; and that in getting on her course again, the Wiman paid off broadly, as above stated.

Three witnesses from the Wiman, on the contrary, testify that they were sailing W., ½S., full and by, after the short tack to the northward above referred to; that they saw the two lights of the Witch Hazel from half a mile to a mile distant, a little on their port bow; that she remained so all the time until she passed to the leeward of them, and that there was no luff or change in the course of the Wiman whatever, until after passing the Witch Hazel, a few minutes before the collision, when the wheel of the Wiman was put hard-a-port, *in extremis*, to avoid the collision; that shortly after seeing the two lights of the Witch Hazel, the green light of the Wheaton was seen nearly ahead or a little on the starboard bow. Two of her witnesses say that her green light continued to broaden off on the starboard bow until it had reached, one witness says, one or two points, and the other says three points, on the Wiman's starboard bow, after she had passed the Witch Hazel; that not long before the collision the Wheaton suddenly changed her course under a port wheel. so as to pass to port of the Wiman; showed her two lights for a few seconds, then shut in her green light, and showed her red light; that the Wiman then put her helm hard-a-port; and that the collision happened a few seconds afterward. the port bow of the Wiman striking the port quarter of the Wheaton.

From the lights of the Wiman it was manifest to both the other vessels from the first, that the Wiman was sailing close hauled; and the others were bound to keep out of her way. A collision having happened, the presumption is against the Wheaton. The burden of proof is upon her to show, by a preponderance of evidence, some fault of the Wiman. The presumption against the Wheaton is increased by the absence of any proper lookout on deck. The only evidence upon which she can rely is that of Captain Arnold, of the Witch Hazel. It is impossible for me to hold that his evidence alone is sufficient to overcome the direct and positive evidence of the three persons who were on board the Wiman, who testify that there was no such luff as supposed. The testimony of these three persons, though varying somewhat, does not differ more than might be expected from the different time or manner of observing by witnesses who are not swearing to a concerted story. Upon the courses given for the Wiman and the Witch Hazel, the positions in which it is testified that their lights were first seen to each other respectively, are not strictly reconcilable with each other. Their courses, as given, varied two points from opposite. If this were so, the two lights of the Wiman could not have been seen half a point to starboard of the Witch Hazel, and the Witch Hazel's two lights at the same time have been seen a little on the port side of the Wiman. It would require a variation of about two points by one of the vessels, or by both of them together, to make this possible. The Wiman alone could not vary so much to the northward, as the wind would not have permitted it; the Witch Hazel, on the other hand, with the wind nearly aft, and yawing easily, might have been going considerably to windward of her supposed course at the moment when the Wiman was first seen, as her captain says, half a point on the Witch Hazel's starboard bow. If the latter were at that moment thus yawing to the northward, that would explain why when the captain ordered her course due east, that supposed change did not shortly cause the red light of the Wiman to be shut in, or the green light only of the Witch Hazel to be seen on the Wiman, as he intended. The evidence from the Wiman, however, is unanimous that the two lights of the Witch Hazel continued to be seen all the time, until she passed to port.

Not only is it improbable that the Wiman, sailing close hauled, should have luffed up into the wind if the Witch Hazel were passing to the windward of her; but if, as Captain Arnold supposed, he had changed his course so as to show his green light only, it would be utterly incredible that the captain of the Wiman, seeing only this green light, and seeing that to windward also, should have luffed so as to go apparently directly into her. The rule so often applied in such cases should, therefore, be applied in this, that superior credit must be given, in regard to a vessel's own movements, to the testimony of those on board of her, where it is probable and consistent, and not overborne by any decided weight of other testimony. The appearances testified to by Captain Arnold, I have no doubt, were caused mainly by the changes in his own position.

The testimony of captain Arnold is altogether insufficient to establish how far the Wheaton was to leeward of his own course. In one place he estimates it to be a quarter of a mile; in another place he calls it a short distance to leeward; but the precise course that the Wheaton was keeping is not known. Captain Arnold says that she was going somewhat more to the northward than he. Whatever her distance to leeward was at some previous time, according to his testimony, therefore, it must have been constantly lessening; and nothing trustworthy can be gathered from his general estimate under such circumstances. Counsel for the libelants claim that if the Wheaton were to leeward of the Witch Hazel, her lights could not have been seen from the Wiman, as testified to by the witnesses on the Wiman, to the windward of the Witch Hazel, so as to be more upon the Wiman's starboard bow than the Witch Hazel's lights. Considering, however, that the Wheaton was half a mile astern of the Witch Hazel, and that the courses of the latter and the Wiman varied two points from opposite, it will be found by placing models on a chart that the Wheaton might be some considerable distance to leeward of the course of the Witch Hazel and yet as seen from the Wiman, be more on the latter's starboard hand than the Witch Hazel, precisely as the Wiman's witnesses testify. The testimony of Captain Arnold, moreover, that the Wheaton was sailing more northerly than he, accords with the testimony of the witnesses from the Wiman, that they saw only the green light of the Wheaton; and if her green light only were visible, and her course was more northerly than that of the Witch Hazel, the Wheaton would naturally and necessarily broaden off more to starboard, as two of the witnesses from the Wiman state. So that the account given by the latter seems to me confirmed in part by Captain Arnold.

What may have been the particular cause which induced the Wheaton to port her wheel, when she was to starboard of the Wiman, cannot be known, in the absence of of all testimony on that subject; that she did port is testified to by all the witnesses, including Captain Arnold; and the libel also alleges it.

Without adverting to the testimony as to the amount which the Wiman would pay off before she could regain her course after luffing up into the wind and losing her headway, it is sufficient to say that I cannot regard such a luff as established. In any case, it would be almost incredible that a schooner sailing on the wind and having the right of way, should, without apparent necessity, have luffed so as to lose all headway. But if she had, the vessel would have been a very poor sailer, or very badly handled, that would not have regained her course in far less distance than the half mile which separated the Witch Hazel and the Wheaton.

The evidence on behalf of the Wheaton seems to me totally insufficient to overcome the presumptions which are against her; and the libels on her behalf must, therefore, be dismissed with costs. (The E. H. Webster, 18 Fed. Rep., 724; the City of Chester, Do., 603; the Albert Mason, 8 Fed. Rep., 768, 2 Do; 821.)

The cross libel in favor of the Wiman is rendered unavailing through the loss of the Wheaton. The proceeding to limit liability, which has been instituted by her owners, is sufficient to prevent any decree against them in this case.

April 28, 1884.

THE J. K. WHITE.

The little steamer J. K. White has been resurrected from the old river bed and now lies in the river opposite Superior street hill. Her appearance is not inviting. She formerly run as an excursion boat between this port and Rocky River.—MARINE RECORD, May 8.

The above item and the presence at this port of Captain Joseph Greenhalgh, her former owner, and a brother of Captain Robert Greenhalgh of the Central tug office, recalls to our mind an occurrance which took place in October, 1872, in which the J. K. White and Captain Joseph Greenhalgh, who now lives in Bay City, figured largely. It is as follows:

The J. K. Whithe was built at this port in 1868 69 by Joseph Greenhalgh. She is 90 feet long, with four feet depth of hold, and was built as pleasure boat, and for some time was employed in carrying passengers between this port and Rocky River, but when that port was filled up, her owner advertised her for sale, and she was purchased by Captain Sam. Thornton of Buffalo, in April 1872, for $8,000, purchase money $2,000, and the rest in payments of one, two and three thousand dollars. The boat was taken to Buffalo and during a portion of the summer was employed in the excursion business, running between that port and Oakland, on Grand Island, in the Niagara River. The captain of the boat proved a poor manager, and the officers sailed down on his craft, while laying in port, and would have tied her up but Thornton put the officers ashore and sailed out of the harbor and ran into Erie where he was overhauled and compelled to give bonds for his appearance in Buffalo. The boat was engaged in the excursion business at Erie for a while, and once with a party of two or three hundred aboard, the captain left the wheel in the hands of a lubber while he was collecting the fare, and while passing out a propeller backed into her and came near cutting the craft in two, and threw everybody off their feet. After this mishap the captain ran his vessel up the lake, intending to sell her if he could find a purchaser, but the boiler gave out, and the vessel put into Black River for repairs and and the captain's funds gave out, and he returned to Buffalo, and gave up the vessel to his creditors. The first payment was due in September and he failed to meet it. Captain Greenhalgh saw an advertisement in the Buffalo papers, offering the vessel for sale, and on the 4th of October he went to that city to try and recover his property. He found about $1,200 in debts standing against the boat, and he settled all the claims, and on the succeeding Monday prepared to steam to this port.

In the morning he went to the custom house to procure a clearance, and was absent an hour and a half, and when he returned he found that some one had actually stolen the steamer and sailed without a clearance. He chartered a tug and started in search of the runaway, and overhauled the boat in the port of Fort Erie, Canada. Thornton hailed the tug and wanted to know if Greenhalgh was aboard. That gentleman made his appearance and proceeded to claim his property, showing his papers and affirming his rights. He went aboard the White, when Thornton seized an axe and declared that he would chop of the hand of the first man who attempted to make fast a line to the boat. The tug left Greenhalgh aboard the White and returned to Buffalo. The two captains walked the deck by turns, each claiming the property, and at night Greenhalgh went ashore. The next morning the Buffalo papers contained an account of the troubles, up to date, stating that Thornton had drawn a knife on Greenhalgh which was untrue. But the proceedings awoke a lively interest in the breast of Mrs. Thornton, who hastened to the scene of action with munitions of war for her beleagued consort. Greenhalgh returned to the boat on Tuesday, to find this addition to the enemy's forces. During the day, Thornton swore out a warrant for Greenhalgh's arrest for trespass. The case was brought before a magistrate, and the latter was discharged. He then went to the custom house and arranged his clearance papers, so the steamer would not be arrested by the Canadian authorities for "coasting." Word was sent to a friend of Greenhalgh's in Buffalo, to charter a tug with a force of men, and come over to the port that night and take the vessel by force. Some of Thornton's friends telegraphed to him to be on his guard, and he determined to show his heels once more. He went aboard the vessel again and found Greenhalgh quietly enjoying a lunch. He went down in a pocket and produced a revolver, presented it full at Greenhalgh, and asked him if he saw it. Greenhalgh's eyesight being very good, he got a most comprehensive view of the hostile firearms and remarked as much to the beligerent captain and next requested him to complete his lunch on the land. In view of the argument Greenhalgh very reluctantly went ashore, and indulged in sundry cries of "murder" and "help" which soon attracted a crowd, which took a deep interest in the proceedings but did not offer to interfere. Thornton then called his wife, and gave her the revolver, remarking as he did so—"You are as good as the men and knew how to use this," and told her to guard the gangway, while he got up steam and made preparations to leave, which he did alone, as the crew had deserted him. Greenhalgh tried to go aboard again, but the gentle Amazon gave him such good advice, that he stayed ashore. Thornton loosed the bow line and went aboard. The vessel swung around, still being held by the stern line which none of the spectators seemed willing to unloose; steam was turned on, the line parted, and the steamer J. K. White started down the Niagara river with a crew of two aboard. The river is rather hard to navigate, the current being six miles an hour, and the channel a puzzler for skillful pilots. But the woman took the wheel, and Thornton acted as engineer, and away they went on their festive voyage. Discouraged but not cast down, Captain Greenhalgh, although baffled for the time, was determined not to give up the pursuit, and he immediately went to the American consul for advice. He told him to telegraph for the whereabout of the vessel, and follow her up and have her attached for his interest. Greenhalgh learned in the evening that the steamer was at Port Robinson, on the Chippewa river. On Wednesday he went to Port Colborne, and that night went up to Welland, the county seat of that county, on the schooner Light Guard.

Thursday morning he swore out a warrant for Thornton's arrest, for assault and battery, and, in company with a constable, went with a horse and buggy, four miles to Port Robinson, when Thornton was arrested just as he was getting aboard the cars, with his wife. The parties returned to Welland, when Thornton was tried and sentenced to pay a fine of five dollars, or go to prison for thirty days. He paid the five dollars, and then swore out a warrant for Greenhalgh's arrest for perjury. Thornton was triumphant once more, as he though he had his pursuer in the clutches of the law, where he would remain for a sufficient length of time for him to make his escape. But the constable, who understood the state of affairs, came to the rescue, went Greenhalgh's bail and he was once more at liberty. Once more he sought counsel and a warrant was sworn out for his property and Thornton's person, and another trip was made to Port Robinson, where the officers took possession of the steamer and Thornton was checkmated. All the parties then went to the custom house, where it was discovered that Thornton had procured a clearance for Port Louise, and the collector refused to grant another or let the vessel leave the port until the difficulty was settled. Thornton was compelled to deliver up his clearance papers and the vessel was without a commander and the captains without a vessel. On Friday Thornton agreed to give up his claims on the vessel if his notes were returned, and Captain Greenhalgh started for Cleveland to secure the papers for that purpose. Captain Joseph Greenhalgh is in the city for the purpose of purchasing the little steamer and will probably have departed with her before the above history reaches our readers.

The Chicago tug Protection, sunk at Saugatuck, will be recoverd after all. Rosel Downer, the diver, and Johnson, the V. O. T. carpenter, are at work on the job. They have got the boiler and engine, out and expect to have the hull up within a few days. The former contractors on the job made a failure of it.

DULUTH HARBOR.

Editor of the Marine Record.

DULUTH, May 26.

At a meeting of the Duluth Chamber of Commerce, held on the evening of the 16th instant, which was fairly attended by representative business men, matters were discussed of such general importance to the merchant marine of the lakes that your correspondent herewith submits a report of the same in as condensed a form as possible, for your columns:

A special committee, consisting of C. F. Johnson Z. D. Scott and C. P. Bailey, having in charge the matter of memorializing Congress in relation to the proposed consolidation of the customs districts of the United States, reported to the Chamber of Commerce their memorial, which was adopted by the Chamber and ordered mailed to members of Congress generally, and also to the different chambers of commerce along the northwestern border, from Lake Superior to Idaho, and also those of the lower lakes, with urgent requests for co-operation.

J. Le Vaquee moved that the matter of range lights for the harbor be taken from the hands of the present committee and placed in the hands of another committee with Captain McDougall as chairman, which was carried, and T. H. LeVaquee and C. P. Bailey were added to the same.

President Simonds called attention to the present condition of the harbor and invited discussion. Captain McDougall was first called upon. He said he had just finished a chart of the dredged area of the harbor from 3,000 or more soundings, actually made, and had found that there were spots all over the dredged area not more than twelve or thirteen feet and others that were as much as twenty-six feet deep, and called upon the residing supervisor of public works, Mr. Wells, who was present, to explain this great difference. Mr. Wells explained that the spots were caused by the large class of propellers now coming to the port for which the harbor was too shallow; that they would often run aground somewhere and in endeavoring to get off would work their screws so violently that, situated as they were, within a foot or so of the bottom, they would tear holes sometimes to the depth the captain had mentioned.

Captain McDougall asked if this condition of affairs was always to continue, or if there could not be a system of floats used, as has been done at the Sault, to show the shallow spots so that they may be removed.

Mr. Wells replied: "There is no way to prevent the formation of humps such as have been mentioned except the dredging of the harbor to such a depth that the wheels of heavily laden propellers, in working their way to the docks, will not disturb the bottom."

While Captain McDougall had no direct reply to this he seemed to think that these humps ought not to be and suggested that Major Allen, the chief of engineers at St. Paul, might publish his proposals for bids for the dredging of Duluth harbor in some Duluth or lake paper, instead of exclusively in an inland (St. Paul) paper so as to invite competition, and thought this might have a tendency toward levelling the humps.

Mr. Wells said he saw no objection to advertising in Duluth papers for bids for dredging.

Mr. Johnson then asked why the board of engineers, having in charge the improvement of Duluth harbor, always found it necessary to recommend the same appropriation for the harbor of Superior as for that of Duluth. He understood that these recommendations were supposed to be made for the interests of commerce, and he did not see why our chief of engineers should, year after year, recommend the same amount for a harbor that has no commerce to speak of as for one that has a large commerce.

Mr. Mitchell, of the Tribune, then took up this cudgel and laid about him with it unmercifully. Mr. D. S. Cash followed with a brilliant speech on the subject, showing plainly the discrimination against Duluth and the lameness of our past action in the matter of harbor improvements. Upon his motion a committee of five was appointed, with Captain McDougall as chairman, to confer with the board of engineers about the proper recommendations for our harbor and concerning the best use of appropriations when made. D. S. Cash, C. F. Johnson, Z. D. Scott and A. S. Chase were made members of this committee. These gentlemen have already entered upon their labors and purpose to leave no stone unturned until the present disgraceful state of our harbor ceases to be a crying shame.

B.

SIGNAL LAMPS,
—WITH—
Patent Fluted Lens And Perfect Colors.

GET THE BEST & AVOID COLLISIONS.

These Lamps give a more brillant light than any Signal Lamp now in use. They have been adopted by the principal Ocean and Lake Steamers and Vessels, and are for sale in the principal ports on the Atlantic coast and lakes.

French Wrought Iron Ranges and B oilers for Steamers and Hotels. Manufactured by

Felthousen & Russell,

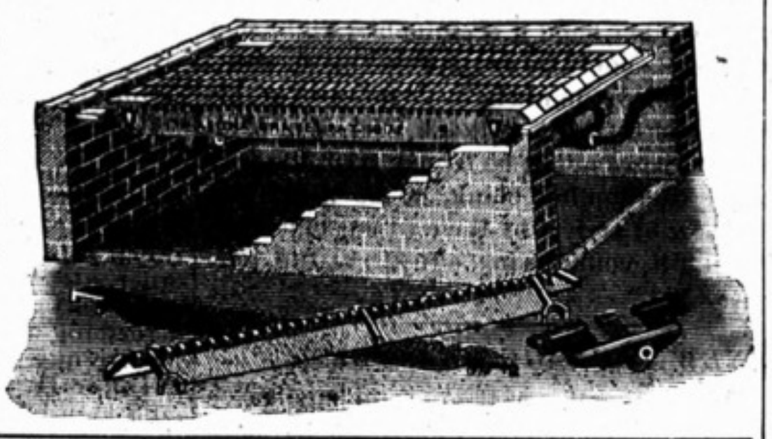
Send for catalogue. 139 & 141 MAIN ST., BUFFALO N. Y.

THE ÆTNA GRATE.

G. C. BARNES, Agt.

This Improved Shaking Grate Especially Adapted to Burning Slack.

Globe Iron Works, Manufac's.,
Office and Foundry, corner of Elm and Spruce-sts., CLEVELAND, O.



ST. MARY'S OHIO. MONTPELIER, OHIO
OAR FACTORIES.
BRECKENRIDGE, MICH CARROLLTON, MICH

DE GRAUW, AYMAR & CO.,

MANUFACTURERS AND IMPORTERS OF

Cordage, Oakum and Anchors,

Wire Rope, Chains, Oars, Blocks, Buntings,

RUSSIA BOLT-ROPE, FLAGS, COTTON & FLAX DUCKS,

Marine Hardware and Ship-chandlers' Goods Generally.

34 and 35 South-st, New York.

BODIFIELD & CO.,

8 South Water-st Cleveland

DEALERS IN RUBBER GOODS

Agents for Akron Rubber Co.'s
Valves, Hose, Packing, etc.

W. W. LOOMIS,
Erie, Pa.,
SHIP AND BOAT BUILDING,

Fishing Tugs, Wrecking, Repairing and Pier Building with Most Improved Facilities.
All Work Guaranteed. Correspondence Solicited.

N. C. PETERSON
Boat Builder,

PLEASURE BOATS AND SAILING AND STEAM YACHTS, YAWL BOATS, SPOON OARS, STEERING WHEELS, ETC.

385 Atwater st., Near Riopelle,
DETROIT, MICH.

BUTTS COAL CO.,
[LIMITED.]
Only Miners of
BUTTS CANNEL COAL,
and dealers in Gas Coals, Nut Coals, and Steam Coal for Tugs, Barges, e.c.

CLARK I. BUTTS,
CLEVELAND, O. . General Manager.

DAVID BARNHISEL, Agent.
DOMESTIC & STEAM COAL
Cleveland, Ohio

$66 a week at home. $5.00 outfit free. Pay absolutely sure. No risk. Capital not required. Reader, if you want business at which persons of either sex, young or old, can make great pay all the time they work, with absolute certainty, write for particulars to H. HALLETT & Co., Portland, Maine.

F. & H. BORN,
PLUMBERS.

Manufacturers of Hotel Ranges & Laundry Stoves, and Dealers in

House Furnishing Goods,

128 SUPERIOR ST., CLEVELAND, O.

Phœnix Paint Co.,
MANUFACTURERS OF
ELASTIC
MIXED PAINTS.
OFFICE AND FACTORY
36 Michigan St., CLEVELAND, OHIO.

V. D. NICKERSON,
MARINE ARTIST
Rear of Central Tug Office, Main St. Bridge, Cleveland, O.

Vesselmen
SHOULD HAVE
OUR MARINE LAW BOOK,

Containing all points of MARINE LAW as determined by the United States Courts
—ON—

Seamen,	Owners,
Freights,	Charters,
Towage,	Registry,
Collisions,	Enrollments,
General Average,	Common Carriers,
Duties of Seamen,	Masters & Owners,
Bill of Lading, Wages, &c.	

The volumn is handsomely bound in stiff Board covers, and fine English cloth binding. Sent to any address postage paid for $1.00.

CUYAHOGA WORKS,
Established in 1834.
MANUFACTURERS OF ALL KINDS OF
MARINE ENGINES
AND
HEAVY MACHINERY.
cor. Detroit & Center-Sts, CLEVELAND, O.

Geo. B. Carpenter & Co.,
Ship Chandlers and Sail Makers.

Ship Chandlery Goods of all Descriptions.
MANILA ROPE OF THE VERY BEST MAKE
Steel and Iron Wire Rope and all Its Fittings.
202 to 208 South Water-st.,
CHICAGO, ILL.

FOR SALE,
New Iron Tug.

Dimensions 78 feet long, 17 feet beam, 11 feet deep; draft, 9 1-2 feet; engine, 20x20, new steel boiler 7 feet in diameter, 13 feet long, allowed 112 pounds steam. Three iron breast hooks forward, collision bulkhead forward, water tight bulkhead forward of boiler; iron coal bunkers, water tight bulkhead aft at shaft-gland, with water tight iron deck forming the floor of after cabin. Iron decks, bulwarks and deck houses; iron tow posts aft. Heavy angle iron frames, with reverse bars on alternate frames; ⅜ plate, steel floor plates; boiler, engine and bearing foundation of iron. For sale cheap when machinery can be completed by

GLOBE SHIPBUILDING CO.

FOR SALE.
Quarter Interest in the large Tug Samson,

One of the most powerful tugs on the lakes. She was built at St. Catherines by Shickluna, rebuilt in 1881 and measures 181 [new] tonnage. She is straight A2, with insurance valuation of $16,000, and can be insured for $19,000. Will sell quarter for $3,400; part cash, balance on easy terms. Address MARINE RECORD.

For Sale or Exchange,
Tug Annie Robertson.

Length over all 51 3-10 feet, breadth 13 3-10 feet and depth of hold 6 feet; draws 5½ feet of water; measures 9 24-100 (new) tons. and 18 24-100 old. Built in 1880 and rebuilt this spring, new deck frames and cabin, and machinery thoroughly overhauled. Engine is 14x14, boiler 8½ feet long and 4 8-12 in diameter. Warranted in No. 1 condition and subject to inspection, Price, $3,800. Address

MARINE RECORD OFFICE.

FOR SALE
STEAMBARGE MILWAUKEE.

Her length is 135 feet, beam 26 feet, and hold. 10 feet 10 inches. Boiler 17 feet long, 7 feet diameter; three flues, two 16-inch and one 17-inch. Engine 22x42. Carries 240,000 feet of lumber. Speed, 11 miles light, and 9 1-2 loaded. Insurance valuation, $15,300. Address MARINE RECORD Office, No. 2 South Water street, Cleveland, O.

FOR SALE,
A Fine Harbor Tug.

Dimensions of hull 65 feet over all, 16 feet beam, 8 feet hold, and measures 46 tons with 7 feet draft; can be made 6 feet draft. The engine, 18x20, is in first-class condition, with all new brasses, new rings in cylinder and turns a six-foot wheel, which was new last season. The boiler is one year old, is large enough to burn wood or coal and is allowed 100 pounds of steam. Price $4,700, and must be sold inside of thirty days. Address MARINE RECORD OFFICE.

FOR SALE,
Schr. Julia of Kelley's Island.

Her dimensions are 50 feet long, 16 feet beam, 4 feet depth of hold. She is three years old and in good condition. Address JOHN REINHEIMER,
Kelley's Island, O.

FOR SALE,
AT
THE GLOBE IRON WORKS.

SECOND HAND TUBULAR BOILER, 44 inches diameter, 43 tubes 3 inches diameter and 12 feet long, steam drum 30 inches diameter, 40 inches high; front grates, fittings and breechings; good order.

SECOND HAND MARINE BOILER, in good order; Shell, 7-16 inch iron plate; diameter, 9 feet 6 inches, length, 18 feet; 129 tubes 4 inches in diameter, 11 feet 4 inches long, three flues 18 inches diameter; two flues 16 inches diameter, two flues 10 1-2 inches diameter; fire box, 6 feet long, 4 feet high; steam chimney, 7 feet high.

SECOND HAND MARINE BOILER four feet wide, 6 1-2 feet long, 5 feet high, sixty-four 2 1-2 inch tubes 60 inches long, cast iron breeching, good as new.

SECOND HAND MARINE ENGINE; double disect-acting 8x8 inch cylinder, shaft and wheel for yacht or tug; good as new.

The Marine Record.

Published Every Thursday at 144 Superior Street, [Leader Building.]

A. A. POMEROY, Editor and Proprietor.

TERMS OF SUBSCRIPTION:

One year, postage paid.....$2.00
Six months, postage paid..... 1.00

Invariably in advance.

The MARINE RECORD can be found for sale at the following places:

G F Bowman, corner of Pearl and Detroit sts., Cleveland, Ohio.

Joseph Gray, No. 9 West Randolph street, Chicago.

C. Rohmer, Michigan street Swing Bridge, Buffalo, New York.

C. F. Johnson, 117 West Superior street, Duluth Minn.

D. McMasters & Co., Sarnia, Ontario.

Wm. Godley, Escanaba, Michigan.

J. E. Somerville, Manistee, Michigan.

Articles, letters and queries on all subjects are solicited.

ADVERTISING RATES.

Ten cents per line, nonpareil measurement, or $1.20 per inch, each insertion; four weeks $4.00; with a liberal discount on orders amounting to $40.00 or over.

Entered at the Post Office at Cleveland as second-class mail matter.

THE POLICY OF PROTECTION.

In his argument before the Senate the other day Hon. Eugene Hale made several stunning points against the advocates of free ships, who asked the question why America could not permit the free entry of foreign built ships as well as England. He went back to the time of King Richard II, and cited from the navigation laws the following statute: "No subject of the king shall ship any merchandise outward or homeward save in ships of the king's allegiance on penalty of the forfeiture of the cargo." For three hundred years that policy continued. After the wars of the great rebellion in 1640, when England again found her maritime interests at a very low ebb, on account of the destuctive internicine struggles, and she found that the Dutch had gained supremacy, she enacted another protective law, reading as follows: "No goods or commodities whatever of the growth, production, or manufacture of Asia, Africa, or America, including our own plantation (all the colonies) shall be imported into England or Ireland or any of the plantations, except in English built ships, owned by English subjects, navigated by English commanders, and with three-fourths of the sailors Englishmen." It is thus quite evident that she did not take to any "free-ship" policy to recuperate her failing maritime service. For years this extreme measure of protection prevailed, and it brought England's shipbuilding ability up to a point of cheapness that could not be touched by any other power. It was found in 1850 that these enactments had enabled her to so far surpass in this respect that she could abolish them and permit free entry for the very best of reasons, that no other nation could build and sell ships cheaper, and that she would be a gainer rather than a loser by a free ship policy. If our free-ship friends want to imitate England in the matter of free ships, why do they not propose the course that she adopted—protect our shipbuilding industry until it is fully able to compete with any country—not destroy it by admitting England's cheaply built ships free of duty.

CLEARANCE PAPERS.

Some of the tug men, engaged in desultory towing up and down the lakes, appear to be unhappy over the regulations by which they are governed. They say that in order to leave port they must take out a clearance. If they do not know where they are going, on account of their object being the chance capture of a tow, they make a random choice of some port to which to clear and then start out, having been careful to choose a port in a line with the direction they wish to take in search of employment. If they get a tow of course they must take it to its destination, wherever that may be; if it happens to be the port to which the tug cleared she is all right, but that is one chance in a hundred. In ninety-nine cases the tug is obliged to go with her tow to a port for which she has no clearance, and when she reaches one there is trouble. Another cause of complaint is found in the regulation that requires a tug to have a clearance for herself when unaccompanied by a tow. She may, however, leave port with a tow without a clearance, but if she drops her tow for any cause the tug can not enter a port alone without papers. These appear to us very loose regulations. They put customs officers on their discretion in regard to tugs coming into ports with improper clearance or no clearance at all, and there is no alternative. If a clearance is for the purpose of keeping a record of the movements of a vessel there is no wisdom in requiring one when a vessel has no objective point, but merely goes out in search of a port, as she is in search of a tow. On the other hand it is eminently right that no vessel should be exempt on this account. Some remedy should be made for cases of this kind, and it strikes us that a sort of a wildcat clearance might be issued, with the port of destination left blank, to be filled in at the port of arrival by the customs officer receiving it, could be made to serve the purpose.

NEW TONNAGE MEASUREMENT.

By the adoption of the new tonnage measurement an eminently proper step has been taken. Formerly no allowance was made for space taken up by machinery or boiler, that made unavailable for stowage a large per centage of the room of all craft propelled by steam. Of course the Government no more than any one else concerned in the matter could have interest in a vessel outside of its carrying capacity, and maritime men have long wondered why they should be taxed for carrying their own boilers and machinery, the same as though the space assigned to their propelling apparatus were occupied by rate-paying cargoes. Now, however, by the law passed by the last Congress all these unavailable spaces are dedueted from the gross measurement, which will make a vast difference with steam craft of all kinds. It also provides for leaving out of account the quarters occupied by the crew in sailing vessels. It is a radical reform, certainly, and it would not be strange if, like all other radical changes, it does not go too far the other way. In about a month the government will issue its annual list of vessels belonging to the merchant marine of the United States, (the 16th,) and from it the new measurement of all vessels can be learned accurately.

DEATH OF SAMUEL LORD.

Samuel Lord, one of the oldest and we may say best mechanical engineers, died last Thursday the 22d inst. at the age of, 59 years. Mr. Lord was connected for a number of years with the Globe Works when they first started business in this city and was in charge of the engineering and machinery department, and together with other members of the firm was one of the builders and owners of the old Ætna mills at Newburg. For a number of years, and up to the time of his death, he was associated with Mr. Bowler in the machinery business, during which time he has made many improvements in steam engines and other machinery. By his death Cleveland is deprived of one of her most progressive mechanics, a gentleman known throughout the west and southwest. Mr. Lord built the engines for the tugs Rumage, Mary Grundy and others.

THERE is no marked change in the iron market since our last report. Business generally is dull, but there is an undercurrent of silent activity in iron that is moving perhaps the bulk of the visible supply and relieving the market sufficiently to preclude a plethoric condition. The close of next week will determine the wage issue between the rolling mill proprietors and their employes, and the result of the conference must be a matter of conjecture simply. The ability of the mills to pay the scale demanded is not considered by the workmen. Their attitude indicates that the great enterprises they are employed in should be run solely for their lucrative compensation. Aside from these labor agitations the iron industries of the country, though confessedly depressed, are not in a desperate condition at all, and with good crops assured, and confidence in monetary circles restored, a better feeling will prevail, and buying will be more liberal, and should the rolling mills continue running the demand for pig iron will necessarily be increased, as the stocks in the mill yards are very light.

LITERARY NOTICES.

THE JUNE CENTURY.—Though there are four profusely illustrated papers in the June Century, and four full-page pictures, this number of the magazine is perhaps even more notable for its literary features than for its pictures. Of special interest is Miss Fannie Stone's "Diary of an American Girl in Cairo during the War of 1882." President Eliot, of Harvard, discusses the question, "What is a liberal Education?" in which he claims that the sciences and English should be given leading places in the school and also in the college course. In "Topics of the Time," an editorial called "Reaping the Whirlwind" is a sequel to the editorial of the April Century entitled "Mob and Magistrate" In "Open Letters," Dr. Charles S. Robinson continues his series on church music with "What the Choirs Say;" Prof. Ritter and Mr. Grant White break lances over "Music in America." The illustrated papers of the June Century in their order, are "A French-American Sea-port," and a part of Mr. S. G. W. Benjamin's series describing his cruise in the Alice May; a picturesque, anecdotal description, by Franklin H. North, of the seamen's retreat on Staten Island, or "Sailors' Snug Harbor," to which paper belongs the frontispiece of the number, an engraving from St. Gauden's statue of Robert Richard Randall, the founder of Snug Harbor. In fiction, Henry Jame's new story, "Lady Barberina, in this number, concerns itself with the complications af marriage settlements; Mr. Cable's "Dr. Sevier," is continued; and Robert Grant's story of "An Average Man" is concluded. The short story of the number is by H. C. Bunner, entitled "The Red Silk Handkerchief." The poetry is by clever writers.

ST. NICHOLAS for June is a bright out-of-door number, nearly every article taking the reader out into the woods and fields, yet without sacrifice of the variety of subject and interest which is so distinguishing a feature of the magazine. J. T. Trowbridge's serial, "The Scarlet Tanager," shows how much easier the hero found it to get into a scrape than to get out of it; "Marvin and his Boy Hunters," Maurice Thompson's serial story, tells of hunting small game on the Indiana prairies. "The Banner of Beaumanoir," the sixth of Miss Alcott's "Spinning-wheel Stories," is a vivid boy and girl story of devotion and adventure in the Middle Ages; "Frederick of Hohenstaufen, the Boy Emperor," is another of E. S. Brook's "Historic Boys." A live story for boys is written by W. W. Fink, and called "Two Boys of Migglesville." A hintful paper for girls is "Margaret's 'Favor-Book,'" by Susan Anna Brown. The illustrations are numerous and beautiful.

NAUTICAL NOTES.

The D. C. West has again changed hands in Toronto.

A project is on foot for a monster drydock at South Chicago.

The tug American Eagle passed a satisfactory inspection.

It is insisted that the Argyle and Severns struck the same rock.

A new boat builder has made his appearance on the Montreal road.

The steamboat inspectors condemned the steamer Monitor and she is laid up for repairs.

The new D. and M. ore pier at Marquette will be ready for business by the middle of June.

Iron steamers can load to 14 feet 8 inches and wooden vessels to 15 feet in crossing the Lime Kilns.

The injuries to the steamer Wocoken by going aground are not believed to amount to much.

The schooner C. K. King went into the Wolverine drydock to stop a leak made while coming up Lake Erie.

The schooner E. Taylor, which was ashore on Gull Bar near the Brothers, has been released by the Folger.

The total loss of the propeller J. S. Seaverns and cargo, which sunk on Lake Superior recently, was $32,934.

The Lackawanna railroad will employ the steamers formerly comprising the Commercial line. The route is Buffalo and Chicago.

An expedition to raise the propeller Forest Queen, sunk fifteen years ago near the "Dummy," is being fitted out at Amherstburg.

Jerry Crimmings, stroke ore of the Queen City Rowing club's big crew, has been appointed keeper of the lighthouse on Horseshoe reef, near the Canadian shore.

The owners of the schooner Jennie and Laurie and Nellie and Annie each claim $500 of the schooner Little Georgy for damage received in a collision at Muskegon, May 2.

Captain J. S. Byron, of the tug boat Chicago, was fined $25 by Justice Hawkins for stopping a sailing vessel in the draw of the Clark street bridge and compelling the bridge to be open seven minutes longer than was necessary. The defendent filed a bond to appeal the case.

A libel was filed in the United States District Court against the barge Mary Stockton in favor of Ward's Detroit and Lake Superior line by the propeller Hodge's master and crew for salvage in saving the Stockton and her cargo of lumber, found abandoned at sea, and taken to the port of Buffalo.

The various steamboat lines have issued orders to their agents at Chicago restricting them from accepting grain cargoes for less than 2 cents on corn and 2½ cents on wheat to Buffalo. The propeller New York was chartered for corn and rye, and the Commodore for corn.

The fourth collision on Lake Michigan last week occurred early Thursday morning off Sheboygan, when the schooner Marengo and an unknown vessel came together with a terrific crash. The weather was very thick. The Marengo's anchor was carried off by the unknown vessel until eighty fathoms of chain were reeled out, when a crash was heard and the anchor freed itself from the strange vessel. Some plank of the Marengo's bow were stove in and her staysail yard broken in two. Captain Roach, of the Marengo, does not know what the other craft is, but took her for a lumber vessel. Nothing has been heard from her along the shore.

LIMITATION OF LIABILITY.

A petition was filed in the United States District Court, in this district, yesterday, by Messrs. John W. Moore, Alexander Gilchrist, M. A. Hanna and R. Pelton, the owners of the steambarge H. B. Tuttle, which is the first case of limitation that has ever come before this court, and will attract much attention, as it involves the steambarge H. B. Tuttle, or $80,000, the sum the Silver Islet Consolidated Mining and Land Company place their damages at for the non-delivery of a cargo of coal to be delivered by the above-named steamer, shipped at Sandusky for Silver Islet, Ont. The facts are that, on November 13, 1883, the steambarge H. B. Tuttle left Sandusky with a cargo of coal, bound for Silver Islet, Ont., on the north shore of Lake Superior. The water was low at Sandusky, and the Tuttle ran aground outside of the harbor. The heavy sea carried her rudder away, and a tug had to be secured to tow her to Detroit. At that port the boat was detained until necessary repairs were made. On November 20th she started on her voyage, but, in going up Lake Huron in a dense fog, she ran aground on North Point. After being released she continued on the voyage, but the season of navigation being so far advanced, and gales frequent, the Tuttle was compelled to seek shelter at Copper Harbor, and finally at L'Ance, where she was laid up for the winter, it being impossible to continue. Sections 4283, 4284, 4285 and 4286 of R. S. of the United States limit the liability of vessel owners to the value of the vessel and freight, and under these sections the petitioners seek relief, in accordance with which the court has made an order restraining all persons, and the Silver Islet Consolidated Mining Company especially, from bringing suits against the owners of the Tuttle for claims against the boat. Messrs. Alva Bradley, George Presley and Thomas Wilson were appointed by the court to appraise the value of the interest each of the petitioning owners have in the barge They reported as follows: John W. Moore, 5-12, $10,000; M. A. Hanna, 3-12, $6,000; R. D. Pelton, 2-12, $4,000; and Alexander Gilchrist, 2-12, $4,000; total value of the Tuttle, $24,000. The value of the freight in the barge was assessed at $2,031.75. The Silver Islet Consolidated Mining and Land Company were commanded to appear in court, September 2d, 1884, for the purpose of presenting and proving their claim against the barge. Earl Bill was appointed commissioner to hear the claims brought in by any creditors who may exist.

The steamer Business, the first craft to arrive at Port Arthur with coal this season, entered this port on Monday on return with ore from Marquette.

[*Continued from 1st Page.*]

fully understanding the position in which he had placed himself, decided to take immediate action and informed the Canadian engineer that he must revoke his license. The law in this case precludes an inspector from issuing a license to an engineer who has not declared his intention of becoming a citizen of the United States. S.

BUFFALO.

Special to the Marine Record.

Hingston and Woods have established water communication at and between the new channels they have excavated in the Tifft farm for the Lehigh Valley R. R. Company and the Blackwell Canal. This opens up between three and four miles of new dock room for Buffalo. The first vessel passed through the draw of the bridge Thursday, afternoon the 22d inst. Vessels drawing over twelve feet had better not attempt to use these channels until they are leveled off.

Messrs. Hingston & Son, builders of steam and sail yachts and boats of every description, have just completed a new boat house, foot of Porter avenue.

The new iron revenue steamer Commodore Perry, made a trial trip on the 27th. Except a slight defect in the main valve of her engine, which can easily be remedied, everything worked satisfactorily. She is a fine craft in every respect. She will be commanded by Captain J. A. Henriques, and make her headquarters at Erie. In a few days she will go into service.

Coal freights were firm with good demand for tonnage. Engagements comprise steamers James Sheriffs and W. T. Graves and schooners G. W. Adams and H. A. Kent, for Milwaukee, at 80 cents; steamer Starucca, for Chicago, at 80 cents; steamer Nipigon and schooners Middlesex and Melbourne, for Duluth, at 80 cents; barge George Worthington, for Detroit, private terms.

Messrs. Hingston and Woods have taken one of their large dredges to Tanawanda, in order to dredge a strip one hundred and forty feet by eighty feet, for Hollister Bros. This will give Hollister Bros. over twelve hundred feet additional dock roomd. Hollisted Bros. are enterprising young men and cannot meet the demands of their business, without more room to receive their cargoes.

Vessels have had considerable trouble in Buffalo this spring owing to two bars that formed in the river, and opposite the drydock and one near the Erie freight sheds. They have been removed, by order of the city engineer. Y. A.

ASHTABULA HARBOR.

Special to the Marine Record.

The tug S. S. Stone, which arrived from Cleveland on Monday, departed with the schooner Charles Wall, which will go in Globe drydock to have a leak stopped and some calking done.

CLAYTON.

D. D. Calvin, for many years a prominent resident of Jefferson County, died in Garden Island, Ontario. His remains were interred Tuesday at Clayton. He was born in Vermont, but removed to Rodman when a young man, and soon after engaged in timber and rafting business, which he pursued for a number of years. In 1836 he commenced shipbuilding, and during his lifetime constructed some of the best known lake and river vessels. Mr. Calvin was also for twenty-five years engaged in the wrecking business.

The new steamer St. Lawrence, built by the Thousand Island Steamboat Company, was launched here on Saturday. The boat is 165 feet over all, and cost $50,000. She will run in connection with the Rome, Watertown & Ogdensburg railroad on the Cape Vincent-Alexandria Bay route. Over 1,000 people were present at the launch.

MANITOWOC.

A private dispatch announces that the tug Delta, from Escanaba, succeeded in rescuing the schooner H. A. Richmond from Fisherman's shoal. She was pumped out by the Delta's pumps in five hours. To what extent the vessel is injured cannot be known until she is placed in drydock, which will be at Manitowoc or Milwaukee. The Richmond measures 223 tons and rates B1. There is insurance on her, but to what extent is not ascertained.

Captain William Keith held a survey of the schooner E. P. Royce, which was damaged by a collision with the schooner Marengo. The Royce will require a new foremast, a new chain plate for fore and mizzen rigging, new main and mizzen topmast backstays, new stern-planking and some new timbers. All of her chain plates will require repairing. She will also need a new gaff topsail and some repairs to her yawl boat. The repairs will cost $1,000, and will be made by Rand & Burger. The vessel will be ready about Saturday.

MILWAUKEE.

Special to the Marine Record.

Another new steambarge is to be built at the Milwaukee shipyard, the keel for which was laid Monday. She is to be 140 feet keel, 28 feet beam and 10 feet hold. There is nothing doing in the shipyards at present, so that the work will be pushed on the new boat and she will be ready by fall. She is to be of about the same model as the steambarge George C. Markham, built at the same yard, but will be somewhat smaller. Her capacity is to be about 250 m of lumber. Her machinery will be new, and will be of best make, although the contracts have not, as yet, been let. The Milwaukee Shipyard company have gained quite a reputation as builders of fine lumber carriers, having built several within the past few years, and the new one will, no doubt, be as good in model and as staunch in build as any of the others. She is being built for a combination of Milwaukee vesselmen, and will cost about $28,000.

The three-and-after schooner Pride, Captain Joseph Clausmann, had made five trips between Bailey's Harbor and Milwaukee up to last Saturday. She has averaged one round trip per week, and for four times in succession arrived at the Harbor on Saturday morning of each week. The Pride carries about 75 cords of wood.

The schooner Pathfinder Monday loaded 40,000 bushels of wheat for Buffalo at 2¼ cents.

The schooner Maumee Valley has gone to Manistee to load lumber for Chicago at $1.62½.

The steambarge Milwaukee was docked at the Milwaukee shipyard Tuesday, to receive a new sheriff wheel.

A heavy northeast gale set in at 11 o'clock Monday night, and still continues. All of the big steambarges and their consorts which left here ran back from fifty miles down the lake. No serious disasters are as yet reported.

The passenger steamer Chicago, while leaving here Tuesday morning, struck the south pier, stove in her paddle box, broke her wheel, and had to return.

The wrecking tug Leviathan will attempt the release of the schooner Lincoln Dall, of Chicago, which went ashore at Washington Harbor last fall.

STURGEON BAY.

The Advocate says there was a pretty serious collision in the canal at an early hour on the 20th inst. The Favorite with her tow was passing in, when the undertow created by the propeller caused the lines on the schooner Industry, which was lying in the cut, to part, and she swung partly across the channel. Instantly afterward the little vessel was struck by the first barge of the tow, and her rudder broken, the martingale displaced and the other damages of a more or less serious nature inflicted. The Industry was loaded with wood and was lying in the canal waiting for favorable weather to proceed south. The damages are being repaired as best they can.

The steamer Corona does not call at Menominee on her way to Manitowoc from here, but comes directly from Fish Creek, skipping Egg Harbor going south. On her return the boat stops at Egg Harbor and all ports on the east shore of Green Bay.

'Longshoremen at Egg Harbor are paid at the rate of 25 cents per hour.

Up to Saturday no shipments had been made from Sister Bay this season.

SARNIA.

The steamer Sovereign, of the Northwestern Transportation Company, which has been laid up at Sarnia for a couple of seasons, received a thorough overhauling and left on Saturday afternoon for Duluth with a full cargo of C. P. R. supplies. She is now as good, as new, and will call at all the north shore ports. The Ontario also left Sarnia on Saturday with full cargo of passengers and freight.

PORT DALHOUSIE.

The schooner J. Bigler, from Charlotte to Port Arthur, grounded slightly between here and Niagara Monday afternoon during a heavy fog, was got off in an hour, the weather being calm; and was not damaged at all. She has gone on up the canal.

TOLEDO.

The new and staunch little steamer Secor has applied for papers permitting her to carry passengers.

CHICAGO.

Special to the Marine Record.

The schooner Wolverine went ashore off Hyde Park Sunday night in a dense fog. She was in tow of the tug Mary McLane at the time. Part of the schooner's cargo of lumber was lightered onto a scow and she was towed off Monday morning without much damage.

J. S. Dunham's tug A. Mosher, did excellent service at the fire at Sibley's warehouse on Sunday last. She was towing the steamship Juniata up the river when the fire broke out and Mr. Dunham sent another tug to take her place. The new wrecking and fire tug building at Miller Brothers' for Mr. Dunham, will soon be completed, and will no doubt be of great service in cases of fire in the river.

At the Vessel Owners' drydock schooner A. J. Scoville got some iron knees under her deck frames; the schooner Parana had her centerboard calked; the steamer Imperial got some new stanchions and wale strake; schooner R. L. Fryer got her decks calked.

At Miller Brothers' drydock the tug John Miner is in getting a new starboard bow, rendered necessary through collision with the tug Chicago last week. The barge Kellogg was in drydock for repairs to her bow, the steamer F. & P. M. No. 1 having collided with her on Lake Michigan. The steamship Monohansett got a new mainmast; the steamer Imperial, which was launched last week is getting her cabins put on and will be ready by the end of the week. She will take the place of the steamer Imperial now in use by the distillers. The latter has been sold and will have a new name. Miller Brothers have built two derricks for Palmer, Trowbridge & Co., coal merchants; three for the Silver Creek Coal Company, and one for John Murray, coal merchant, all to be used for unloading coal at their docks.

The L. M. & L. S. Transportation Company's steamship J. L. Hurd, arrived at this port with a general cargo on the afternoon of the 22d of May, from Ashland, Lake Superior. She left the latter port on the 17th, and called at Bayfield, Hancock, Houghton, Marquette, Sault Ste. Marie, Mackinaw and Milwaukee on her way to Chicago. The weather was very cold on Lake Superior and vast quantities of ice were encountered between Whitefish Point and Marquette.

The sidewheel steamer John A. Dix, Captain David Cochrane, arrived here on the 24th. She will run excursions out of this port during the summer months. She will carry 500 passengers, and we wish Captain Cochrane good luck in his new undertaking.

The schooner-yacht Idler went into the Chicago drydock and had her bottom cleaned and painted; the canal boat C. Walker will have a new starboard side, rendered necessary in consequence of having collided with the steambarge Mary Groh last week, when she capsized, and her cargo of stone was dumped into the river near Sixteenth street bridge; the schooner Penokee is getting a new foremast; the steambarge A. E. Wilds had her cabin repaired, a schooner's jibboom having raked a portion of it off when passing her in the river Monday; the steambarge Coffinberry got some repairs and plank in her bow; the schooner Skylark had a new monkey rail and some repairs; the schooner Lem Ellsworth got a new foretopmast; the schooner W. H. Calkins, a new cathead; the schooner Barbarian, new side ports; the schooner George L. Wren some new plank in her side; the schooner Cuyahoga, recalking and some repairs.

The railroad propeller lines have made the Buffalo rates 2c cents for corn and 2¼c for wheat. The Lehigh Valley company went into the agreement. If outside craft, in order to obtain a cargo, see fit to cut on these low rates, of course it is their privilege to do so. The nominal rate on corn to Midland was 1½ cents; to Kingston, 4 cents. The Anchor line chartered propellers to arrive, for corn to Erie at 2 cents, the capacity being 200,000 bushels. The advantage the propeller lines have over other craft is thus seen. Chicago harbor is crowded with standard tonnage, but as the craft do not belong to propeller lines they must be idle, while the Anchor line charters craft which are only just leaving Buffalo on the way up. The through rates from Chicago to New York were 5⅞ cents on corn and 6⅜ cents on wheat.

The steambarge Missouri and barges went ashore at Point au Barques on Saturday, but were released. The Missouri and Fame each lost 30,000 feet of lumber.

The steamer Sheboygan picked up the tug M. Shields in a disabled condition eight miles off Chicago and towed her into this port.

The schooner Emily B. Maxwell arrived here last Thursday. She collided with the schooner Lotus off Racine Wednesday and lost her jibboom and carried away some headgear. The Lotus was towed into Milwaukee, having sustained considerable damage to her rail, stauchions and plankshear.

The steamship Onoko took out 80,000 bushels of corn and 26,000 bushels of rye. She left for Buffalo. This is the largest cargo of grain ever carried by a lake craft. The Onoko is iron, was built at Cleveland by the Globe Shipbuilding Company in 1882, is owned by Minch and others, of Cleveland, rates A1, and cost $300,000. She is the largest craft on the lakes, and is considered a paying investment. T. W.

DULUTH.

Special to the Marine Record.

The propeller Prussia, falsely reported lost on Lake Superior last week, arrived last Saturday and cleared for Michipicotten river and way ports. The Prussia is the only boat running on that route and is being well patronized.

Considerable rivalry exists as to who shall make the best record at discharging cargoes, which is becoming one of the necessities of lake navigation.

There is a slight improvement in the depth of water in Duluth harbor. Vessels that had hard work clearing the shoals at 14 feet earlier in the season can now load to 14½. Still it is a matter of regret that all dredging has ceased, owing to the want of appropriations for that purpose, as the inadequate depth of water prevents first class vessels loading to their full capacity.

The steambarge Siberia brought 1,926 tons of coal to Duluth last week, of which she was unloaded in fourteen hours. She cleared with 66,000 bushels of wheat towing the Croton with 23,000 bushels.

Captain J. N. Miller weighed out for the schooner David Dows 71,253 50-60 bushels of Duluth No. 1 hard, and for the towbarge Iron Age 35,357 bushels, or 106,610 bushels in one shipment on Saturday last.

The new steamer Kasota is now due at Two Harbors, (the new iron town formerly known as Agate Bay, thirty miles ftom Duluth on the north shore) with 1,600 gross tons of railroad iron. B.

ESCANABA.

Special to the Marine Record.

Boisterous weather the whole week, rain every day, and continuous hoisting of storm signals reminds us that Lake Superior summer season is approaching.

The Andrew Johnson left Milwaukee on her first cruise of the season. She will probably be in our waters early in the week.

Lighthouse supply ship Warrington came in on Friday last with Inspectors Davis and Collins aboard. Next day she proceeded to the Eleven-foot shoal, of which captain Davis made an examination to determine its character and fitness for the erection of a lighthouse thereon, to take the place of that on Peninsula Point.

Shipment of iron ore to the 24th instant, 240,962 tons, the Chapin mine leading with 49,050 tons. At even date last year the aggregate was but 116,223.

No boat of the Goodrich line will touch either here or Green Bay. The Corona will run from Sturgeon Bay to Menominee, and land whatever she may have for Green Bay, Escanaba or Fayette, and the City of Green Bay will distribute it. It is an arrangement involving the handling of freight twice, at Manitowoc and Menominee, and it ruins the route for the passenger trade.

The captain of the Arctic, of the Transit Line, reports lots of ice still on Lake Superior.

The tug Delta went out Sunday morning to the schooner Richmond, ashore on Fisherman's shoal. The Richmond measures 223 tons, and rates B1. She is owned by Hall, of Muskegon, and is valued at $6,000.

The city council, on the 26th inst., took the neccessary steps to extend Ludington street to the water, and to acquire for and in the name of the city, the right to construct a wharf at the east end of said street. E. G.

FROM THE LAKES TO THE OCEAN.

Special Correspondence Marine Record.

DETROIT, May 26.

During the navigation of 1861 five United States revenue cutters were dispatched from the lakes to New York City on account of their being too small for lake service, the Government having determined to substitute steam vessels of larger dimensions. The cutters thus sent out and names of masters were as follows: Revenue cutter A. V. Brown, Captain Douglas Ottinger; revenue cutter Jacob Thompson, Captain T. S. Thompson; revenue cutter Isaac Toucey, Captain Brown; revenue cutter J. S. Black, Captain Lanagan; revenue cutter Howell Cobb, Captain Williams. Only eight vessels were sent to sea, as follows: bark Ravenna, Captain D. N. Malott, wheat, Chicago to Liverpool; bark Alexander, Captain A. Muir, staves to Liverpool; brig J. G. Deshler, Captain A. M. Mann, wheat, Milwaukee to Liverpool; schooner Gold Hunter, Captain Durand, wheat, Milwaukee to Liverpool; schooner Caroline Simpson, wheat, Genessee river to Liverpool; schooner Col. Cook, Captain Humphrey, wheat, Milwaukee to Liverpool; bark Niagara, Captain Muir, wheat, Detroit to Liverpool; schooner Clarabel, 219 tons, Captain Barst, lumber, Cleveland to Boston.

During the navigation of 1862 one propeller and six tugs were dispatched to the seaboard, chiefly to New York or Boston: Propeller Congress, 398 tons, Captain J. Robertson, oats, Chicago to New York; tugs Governor, Hippodamus, Dictator, Oswego, Lady Franklin and G. W. Gunnison, bound for New York City; brig J. G. Deshler, Captain R. Stringleman, wheat, Detroit to Liverpool; schooner Bridget and bark Prince of Wales, bark Chieftain, Captain McTaggart, schooner Sirius, schooner G. Laidlow, Captain Campbel, bark St. George, and bark T. F. Parks, Captain W. H. McLeod, coal oil, Sarnia to Liverpool; bark D. Cornwell, Captain D. McDonald, deals, Port Burwell to Liverpool. The bark Sliepner, 191 tons, Captain Waage, arrived over from Bergen, Norway; during the season, with emigrants, and took on a cargo of wheat and rye at Chicago and left, homeward bound.

1863—bark Chieftain Captain McGlashan, coal oil, Sarnia to Liverpool; barks Ravena, Captain D. N. Malott, and Vanguard, Captain Wm. Jones, and brig J. G. Deshler, Captain Stringleman, copper and staves, Detroit to Liverpool; brig Hanover, Captain W. Galloway, wheat, Milwaukee to Hamburg; schooner Howell Hoppock, Captain D. M. Tucker, copper and staves, Detroit to Liverpool; bark Ravenna, second trip, Captain Malott, and brig Cressington, formerly the Deshler, staves, Detroit to Liverpool; bark Sliepner, Captain Waage, wheat, Chicago to Norway; sloop Skjoldoman, Captain Raathe, provisions, Chicago to Norway. The two last named vessels came over from Europe and returned. Schooners Owen Bearse, Captain Bearse, Alice B., Captain Chase, and I. Lafrinier, walnut, Toledo to Boston. The tugs J. H. Foss, Albert Degroat, W. G. Fargo, Maria Love, Sentinel, and Mary Grandy were all sent from the lakes to New York during the season, chiefly for Government service. The tugs Mary Grandy and Maria Love subsequently came back to the lakes, their names, meanwhile, being changed, the former being called the Balize, the latter the Clematis.

The brig J. G. Deshler (re-named the Cressiugton) arrived at Detroit from Liverpool, October 14, 1863, laden with salt and pig iron, in command of Captain John Jennings. A few days after she took her departure again with a cargo of staves from Detroit, via Cleveland. After getting to sea she was never more heard of. The schooner Lilly, which sailed from Lake Ontario, while on the coast of Ireland in 1859, with a cargo of gunpowder on board, blew up. The brig John H. Harmon was sold for $4,000 at Boston, in 1860, and was soon after lost between Cape Breton and Halifax. Schooner Dean Richmond was sold in Liverpool soon after her arrival out in 1856; price not stated. The schooner Cherokee was sold in Liverpool in 1853. The bark D. C. Pierce was captured and destroyed hy the rebels in the spring of 1861, at Norfolk, Va. The schooner Cataraqui, laden with railroad iron, sprung aleak and sunk in Lake Ontario in 1864. The bark Magenta sprung aleak at sea and was abandoned in 1860. The schooner Republican was wrecked on the Island of Arbacatoa, April 26, 1860, and proved a total loss. The schooner Grand Turk was wrecked at Leland, Lake Michigan, in November, 1869, and one life was lost. Schooner Kate L. Bruce was sold at auction in Boston in 1859. Schooner Twin Brothers foundered at sea, November, 1860. Schooner W. B. Castle sprung aleak and was abandoned at sea, March 18th, 1861. brig Sultan was wrecked on Lake Erie, September, 1864, with six lives. Schooner Sophia Smith was made a barge and afterward lost at Port Austin, Lake Huron, September, 1874. Schooner Adda sprung aleak and sunk at sea, December, 1861. Schooner Sarah Hibbert was sold in New York for $6,500, in 1860 and was lost at Nagg's Head in March, 1861. Schooner Indus was converted into a brig and wrecked on the seaboard. Bark Pride of Canada was sold in Liverpool for $10,500, in 1850, and wrecked on Cariboo Island, St. Lawrence river, July, 1862. Brig Globe was chartered for coal oil, but did not depart. Brig Black Hawk was wrecked at Point Betsey, Lake Michigan, October, 1862, with 19,000 bushels of corn on board. Bark H. E. Howe was sold at London, England, for $7,500, in 1860. Schooner Col. Cook was wrecked in the Gulf of St. Lawrence in 1858. Schooner Bridget was wrecked at Long Point, Lake Erie, en route to sea, in 1862. Schooner C. Reeve, laden with corn, sunk in Lake Ontario, in 1862. schooner D. B. Sexton was wrecked in the Straits of Gibraltar in 1862. Bark E. S. Adams, wheat, sunk by collision in Lake Erie, 1863. Schooner Sirius, while en route, was wrecked at Father Point, October, 1862. Bark Mary Roe, wheat, sunk in Welland canal, while en route. Brig Hanover was sold at Hamburg, Germany, October, 1860. Bark Ravenna was wrecked at Cape Henry in 1864, while en route from Liverpool to Baltimore. The schooner Howell Hoppock had her name changed to Etowah in 1864. Brig Caroline was sold at London, England, in 1860. The schooner Owen Bearse was wrecked on the Delaware breakwater, Atlantic coast, October, 29, 1867. Schooner R. H. Harman had her name changed to Wavertree in 1865, and was wrecked on Lake Huron, November, 1867. Schooner M. S. Scott was wrecked at Racine with a cargo of grain in 1866. Bark Vanguard had her name changed to Wirralite in 1865. Propeller Detroit returned to the lakes, had her name changed to Congress and was wrecked at Thunder Bay, Lake Huron, in 1873. Schooner Junius, laden with walnut for Boston, was lost off Long Point, September, 1866. Schooner St. Helena was lost on the coast of Africa in the winter winter of 1861. Schooner Messenger was condemned as unseaworthy at New York in 1861. Schooner Clifton was sold in New York for $2,000. Schooner Kyle Spangler was wrecked on the Atlantic coast. Steamer America was wrecked on the coast of Texas. Steamer Peerless was condemned at New York City. Schooner Middlesex, laden with deals, lost at sea while en route to Leith, Scotland, September, 1876, her first voyage to Europe.

The foregoing presents a narrative of vessels which went to sea up to 1864, and what became of several. Yet it is possible there may be some omissions, which we have carefully tried to avoid. A number which were engaged in the traffic are afloat on the lakes as barges, or in their original attitude. A score or more of the masters thus employed have crossed the dark gulf and are almost, if not quite, forgotten. A further summary of the foregoing may be looked for in a future issue.

J. W. H.

THE GOODRICH LINE.

The following is a list of the routes established by the Goodrich Transportation Company, with the boats on each, and the names of officers for the season of 1884:

Side-wheel steamer Chicago, on the Chicago, Milwaukee and West shore route—Barney Sweeney, commander; John Woll, first officer; W. E. Symons, engineer; John P. Arnett, clerk; Gavin Watson, steward.

Side-wheel steamer Muskegon, on the Chicago, Milwaukee and West shore route—Edward W. Dorcey, commander; George Witty, first officer; J. H. Conveyeon, engineer; W. F. Humphrey, clerk; F. O. Miller, steward.

Side-wheel steamer Sheboygan, on Chicago and Milwaukee route—Charles McIntosh, commander; Robert St. Clair, first officer; John Smith, engineer; Henry Pates, clerk; T. F. Healy, steward.

Side-wheel steamer Corona, on the Manitowoc and Sturgeon Bay route—Henry E. Stines, commander; John Wilson, first officer; David Long, engineer; F. A. Ross, clerk; T. R. Wickham, steward.

Steamer Menominee, on the Chicago, Grand Haven, and Muskegon route—A. W. Rosman, commander; D. F. McNamara, first officer; M. Downer, engineer; B. B. Herbst, clerk; James O'Hara, steward.

Steamer Ludington, on the Milwaukee, Ludington, Manistee, and Frankfort route—John W. Gillman, commander; John M. Gee, first officer; Ray Flint, engineer; C. Fleauright, clerk; P. Brennan, steward.

Steamer Depere, on the Milwaukee, Ludington. Manistee, and Frankfort route—John Raleigh, commander; Robert Hazelbarth, first officer; James Donnelly, engineer; W. D. Rosie, clerk; John M. Duffy, steward.

The steambarge Manistique will go into the drydock.

While the small schooner Antelope was under sail in a stiff breeze outside the breakwater she collided with the tug George B. McClellan. The schooner's bows were badly stove in, and she was towed into the river.

The schooner L. B Shephard was passing through the draw of the Wells street bridge, in tow of the tug Tom Brown, when the former collided with the schooner Presto, moored at the dock. The headgear of the L. B. Shephard was seriously damaged.

From 10 to 25 per cent Saved

BY BUYING SUPPLIES AT

JOHN SCHEUFLER'S

Cash Grocery,

OPPOSITE FRED GROCH'S COAL OFFICE.

SANDUSKY, OHIO.

MARINE SUPPLIES A SPECIALTY.

C. E. BENHAM,

317 **Detroit Street,**

KEEPS IN STOCK

A Full Line of Vessel Supplies,

Lubricating and Lamp Oils of the Best Quality,

AND A GENERAL LINE OF LAMPS, CROCKERY AND TABLE CUTLERY.

OPEN DAY AND NIGHT.

TELEPHONE NO. 1540.

PROPOSALS FOR SUPPLIES

OFFICE OF SUPT. OF LIFE SAVING STATIONS, NINTH DISTRICT, BUFFALO, N. Y., May 21, 1884.

Sealed proposals will be received at this office until 12 o'clock noon of Tuesday the 10th day of June, 1884, for furnishing supplies to be delivered at Mannsville, Mexico, Oswego, Charlotte, and Buffalo, N. Y., Erie, Pa., Painesville, Cleveland and Sandusky, O., and Louisville, Ky., for the use of the Life Saving Service in the Ninth Life Saving District, or elsewhere, for the fiscal year ending June 30, 1885.

The supplies needed consist of apparatus, ship-chandlery, furniture, paint, hardware, and miscellaneous articles, all of which are enumerated in the specifications attached to the forms of bids, which may be obtained on application at this office.

Proposals to be addressed to the undersigned and indorsed "Proposals for Supplies"

The right is reserved to reject any or all bids, and to waive defects, if deemed for the interest of the Government.

D. P. DOBBINS, Supt. Ninth Life Saving District.

STEADY STARBOARD

AND STOP AT

Capt. Dahlke's

ONE PRICE BOOT AND SHOE STORE

And Examine a Fine Line of Spring Goods at Very Low Prices.

297 Pearl-st., Cleveland, O.

GRUMMOND'S

Mackinac Line,

For Mackinac, St. Ignace, Cheboygan, Alpena, Oscoda, Port Huron, Detroit and intermediate lake and river ports.

Steamer ATLANTIC, Capt. D. Nicholson,

Leaves Cleveland every Friday evening at 8 o'clock.

The Steamer FLORA, Captain J. R. Jones.

Same line, leaves Toledo for above ports every Tuesday morning at 8 o'clock. For further information apply on board boats or to

CLEVELAND FORWARDING CO., Agents, Office and Dock, Foot of Superior-st., Cleveland.

TRAVELERS' REGISTER.

LAKE SHORE & MICHIGAN SOUTHERN.

Commencing Sunday, May 11, 1884, at 12 o'clock noon the time given in the figures below is the new standard (Ninetieth meridian) time, which is thirty-three minutes slower than Cleveland time proper:

Eastward.	Arrive	Depart.
No 4, Fast Limited Express	°1 10 A M	°12 05 A M
No 8, N Y, B & A Express	°6 35 A M	°7 00 A M
No 26, Elyria Accommodation	†8 05 A M	
No 35, Buffalo Ac'm via Sandusky	†10 35 A M	†10 50 A M
No 35, Toledo Accom via Norwalk	†10 35 A M	†10 50 A M
No 12, N Y & B Fast Express	°1 55 P M	°2 25 P M
No 14, Special N Y & Bos Expres		5 00 P M
No 2, Night Ex via Norwalk	9 40 P M	†10 00 P M
No 22, Night Ex via Sandusky	†9 42 P M	
No 26, Conneaut Accommodation	†4 25 P M	

Westward.	Arrive.	Depart.
No 1, Fast Limited Express	°11 55 A M	°12 05 A M
No 23, Mich Express via Sandusky	°2 15 A M	°2 35 A M
No 3, Chicago Express via	‡6 05 A M	6 30 A M
No 25, Mich Accom Norwalk		†6 10 A M
No 21, Toledo Ex via Norwalk	†12 55 P M	†3 20 P M
No 5, St Louis Ex via Sandusky	†12 15 P M	12 40 P M
No 9, Chi Pac Fx via Norwalk	°6 06 P M	°6 30 P M
No 31, Elyria ac to Elyria only		†4 30 P M
No 27, Conneaut Accommodation	†8 10 A M	

Sunday train for Nottingham—Depart 8:30 a. m. and 1:45 p. m.; returning, leave Nottingham at 9:05 a. m. and 3:45 p. m.

Reference marks—° Daily, † daily, except Sunday, ‡ daily, except Monday.

For full information as to trains and connections apply at the new city ticket office, corner Seneca and St. Clair streets, Lake Shore block.

BEE LINE

CLEVELAND, COLUMBUS, CINCINNATI & INDIANAPOLIS.

Commencing Sunday, May 11, 1884 trains of the Bee Line—Cleveland, Columbus, Cincinnati & Indianapolis Railway—will leave and arrive at Cleveland as follows, CENTRAL STANDARD TIME, 33 minutes slower than Cleveland time:

	Depart
No. 3, Cincinnati & Columbus Express	°7:30 A M
No. 23, Galion & Wheeling Express	6:40 A M
No. 9, Col., Cin., Ind & St. Louis Ex	°6:40 P M
No. 5, Col Cin., Ind. & St. Louis Express	°2 35 P M
No. 27, Galion & C. L. & W. Acc	4:30 P M
	Arrive.
No. 8, Col. & Cin. & Ind. Express	°6:40 A M
No. 20, Galion & C. L. & W. Acc	9:30 A M
No 12, St. Louis & Indianapolis Express	°2:00 P M
No. 2, Col. Cin. & Indianapolis Express	9:50 P M
No. 14, Columbus & Cincinnati Express	4:45 P M
No. 22, Wheeling Express	6:45 P M
No. 4, Col., Cin & N. Y. Fast Line	1:15 A M

Trains marked ° daily, all other trains daily except Sunday

E. B. THOMAS, General Manager. O. B. SKINNER, Traffic Manager.

A. J. SMITH, General Passenger Agent.

CLEVELAND, OHIO.

New York, Pennsylvania & Ohio R. R.

NEW YORK, BOSTON AND THE EAST.

The Shortest and Quickest Route to Pittsburg, Washington and Baltimore and the Southeast.

Central or Ninetieth Meridien time, 33 minutes slower than Cleveland city time.

Until further notice trains will leave from the new Central Depot, South Water street and Viaduct as follows:

6.50 a. m. ATLANTIC EXPRESS—(Daily) Pullman sleeping and hotel coaches from Leavittsburgh 8:35 a. m. to New York, Albany and Boston without change. Arrive at Meadville at 10:40 a. m. (dinner) Franklin at 12:08 p. m, Oil City 12:30 p. m, Corry 12.35 p. m, Jamestown (Lake Chautauqua) 1.35 p. m, Buffalo 5:50 p. m. Rochester 8:20 p. m.; Hornellsville 6:00 p m. [supper]; Corning 7:25 p. m. Elmira 8:05 p m. Binghanton 10:05 p. m., Albany 5:00 a. m. Boston 1:45 p. m.; arriving at New York 6:15 a.m.

2.20 p. m. LIMITED EXPRESS—Through Pullman sleeping coach from Cleveland to New York. Arrives at Meadville at 6:30 p. m, Jamestown 8:47 p. m., Salamanca 9:45 p. m., New York 10:10 a. m.

11:00 p. m. NIGHT EXPRESS—(Daily except Sunday) Seeping coach from Cleveland Hornellsville. Arrive at Youngstown at 1:50 a. m., Meadville 3:25 a. m., Corry 4:59 a. m. Jamestown 5,57 a. m, Buffalo 9:20 a. m., Rochester 12:58 p, m., Hornellsville, 11:00 a m, Corning 12:07 p m, Elmira 12:40 p. m., Binghampton 2:19 p m,, New York 9:10 p. m. Arrive at Pittsburgh 5:50 a. m., without change.

2:20 p. m. PITTSBURGH EXPRESS — Daily — Through without change, Parlor car attached. Arrives at Youngstown 5:00 p m., Pittsburg 8:02 p. m., Washington 7:09 a. m, Baltimore 8:19 a. m.

4:11 p. m. MAHONING ACOMMODATION — Stopping at all way stations, arriving at Youngstown 6:55 p. m., Sharon 8:01 p. m., Sharpesville 8:10 p. m.

6:50 a. m. PITTSBURGH EXPRESS — Daily — Through without change. Arrives at Youngstown 9.30 a. m., Sharon 10:30 a. m., Sharpsville 10:40 a. m., Pittsburgh 12 45 p m., Returning, leaves Pittsburgh at 4:15 a. m., 7:45 a. m., 12:55 p. m., and 3:45 p. m.

10 35 a m. YOUNGSTOWN AND PITTSBURGH ACOMMODATION—Stopping at all Way stations, arriving at Youngstown 1:40 p. m., Pittsburgh, 5.45 p. m.

Trains arrive at Cleveland, 6:15 a. m., 6:30 p. m., 10.20 a. m; 1:05 p. m., and 9:45 p. m,

☞This is the only route by which passengers can reach Corry Elmira, Binghampton, New York City and intermediate points without change. No change to Boston and New England Cities.

Baggage checked through to all points East

Through tickets and information regarding the route can be obtained at the office 131 Bank street, and at new Depot of N. Y., P & O R R., South Water street and Viaduct, Cleveland, O.

A. E. CLARK, Gen'l Pass'r Ag't Cleveland, O.
J. M FERRIS, Gen'l Man'gr, Cleveland, O.
M. L, FOUTS, Passenger Agt, 131 Bank St, Cleveland.

The Nickel Plate!

NEW YORK, CHICAGO & ST. LOUIS RAILWAY.

The passenger equipment of this New Trunk Line is all new and is supplied with the latest appliances necessary to safe speedy and comfortable travel.

At Chicago, passenger trains arrive at and leave from the Union Depot, Van Buren street.

Following is the time in effect Nov. 18, 1883, and until further notice:

GOING EAST.

Lv. Chicago	7.45 a. m.		
Arr. Valparaiso	9.37 "		
" Fort Wayne	1.00 p. m.		
" New Haven	1.35 "		
" West Leipsic	3.45 "		
" Arcadia	4.44 "		
" Fostoria	4.57 "		
" Green Springs	5.44 "		
" Bellevue	6.10 "		
Lv. Bellevue	6.20 "	7.55 a. m.	
Ar. Lorain	7.50 "	9.16 "	Accom.
Arr Cleveland	9.02 "	10.22 "	
Lv. Cleveland		10.27 "	3.52 p. m
Arr Painesville		11.38 "	5:05
" Ashtabula		12 25 p. m.	6.03
" Conneaut		1.25 "	6.30 "
" Erie		2.09 "	
" Dunkirk		3.47 "	
" Buffalo		5.20 "	

GOING WEST.

Lv Buffalo	9.50 a. m.		
Arr Dunkirk	11.24 "		
" Erie	1.23 p. m.		Leave
" Conneaut	2.20 "		6.15a. m.
" Ashtabula	2.51 "		6.46 "
" Painesville	3.44 "		7 43 "
" Cleveland	4.52 "		8.55 "
Lv Cleveland	4.57 "	6.47 a. m.	
Ar. Lorain	6 12 "	7.35 "	
Arr Bellevue	7.35 "	9.17 "	
Lv Bellevue		9.20 "	
" Green Springs		9.44 "	
" Fostoria		10.22 "	
" Arcadia		10 34 "	
" West Leipsic		11.30 "	
" New Haven		1 35 p. m.	
" Fort Wayne		1.50 "	
" Valpraiso		5.55 "	
" Chicago		7.50 "	

Through tickets to all points are on sale at principal offices of the company at LOWEST RATES for any class of tickets desired. Baggage checked to destination

For information, call on nearest agent of the Company, or address

B. F. HORNER, Gen'l Passenger Agent,

LEWIS WILLIAMS, General Manager, Cleveland, O.

GOLD for the working class. Send ten cents for postage and we will mail you *free*, a royal, valuable box of sample goods that will put you in the way of making more money in a few days than you ever thought possible at any business. Capital not required. We will start you. You can work all the time or in spare time only. The work is universally adapted to both sexes, young and old. You can easily earn from 50 cents to $5 every evening. That all who want work may test the business, we make this unparalled offer; to all who are not well satisfied we will send $1 to pay for the trouble of writing us. Full particulars, directions, etc., sent free. Fortunes will be made by those who give their whole time to the work. Great success absolutely sure Don't delay Start now. Address STINSON & Co., Portland, Maine.

A PRIZE. Send six cents for postage, and receive free, a costly box of goods which will help you to more money right away than anything else in this world. All, of either sex, succeed from first hour. The broad road to fortune opens before the workers, absolutely sure. At once address, TRUE & Co., Augusta, Maine.

WILLIAM FORDE,

SHIP BROKER,

Vessel & Marine Ins. Agent.

N. E. Cor. Columbus Ave. & Water St., SANDUSKY, OHIO.

H. J. WEBB & CO.,

Ship Brokers, Vessel Owners and Agents.

[ESTABLISHED IN 1856.]

H. J. WEBB & Co., will charter Vessels for Lake Trade. Special attention given to Chartering Vessels in the Lake Superior Iron Ore Trade, both for the season and single trip.

ARCADE BUILDING 101 ST. CLAIR ST., Cleveland, Ohio.

TELEPHONE { Office, No. 338. Residence, No. 1328.

SCOTT & BERRIMAN.

Fire and Marine Insurance Agents and Vessel Brokers.

Attention also given to the purchase and sale of Iron Ore, Telephone, No. 18.
Office, 130 South Water-St., Cleveland, O.

THOS. WILSON

MANAGING OWNER

Wilson's Transit Line.

Gen. Forwarder. Freight and Vessel Agent.
CLEVELAND, O.

CAPT. D. M. BECKER. CAPT. HENRY BROCK

D. M. BECKER & CO.,

Commercial Brokers and Vessel Agents,

Vessels chartered, purchased and sold; contracts made for coarse and heavy freights.
Lake Superior and Escanaba iron ore charters for single trip or season a specialty.

Office, 130 Water St. Room 14. Coal & Iron Ex. Build'g. Telephone No. 953. Cleveland, O.

MOORE and BARTOW,

Ship Brokers and Agents,

No. 121 St. Clair Street, Room 27.
CLEVELAND, - OHIO.

PALMER & BENHAM,

Vessel Owners & Agents,

New Bank Building, corner of Superior and Band Street, Cleveland, Ohio.

MORGAN & RICE,

Vessel Brokers, Marine and Fire Insurance Agents,

Room 20, Chamber of Commerce,

DETROIT; MICH.

Special attention paid to Chartering Vessels.

CAPT. J. W. MILLER. CAPT. R. B. MONTAGUE

MILLER & MONTAGUE,

DULUTH, MINN.

Vessel Brokers and Marine and Fire Insurance Agents, and Board of Trade Weighmen.

Special attention paid to Chartering Vessels; also weighing and Trimming cargoes of grain. Correspondence solicited.

ALEX McDOUGALL,

VESSEL AGENT AND BROKER,

DULUTH.

Owners and masters of vessels wishing to get cargoes of grain from this port will do well to confer with me. Will be glad to furnish information in regard to cargoes, also in relation to docks, depth of water, etc., at **Duluth, Agate Bay** (new iron ore port), **Port Arthur, Washburn, Ashland,** and all points near the west end of Lake Superior. Good gangs of men furnished on short notice for trimming cargoes of grain, loading and unloading all kinds of freight.

JAMES T. ROSE,

Vessel Agent and Broker,

BOX 1616, DULUTH, MINN.

Late Gen. Ag't for Collingwood Line of Steamers
Special Attention Paid to Chartering Vessels.

ATKINS & BECKWITH,

Vessel Owners & Agents

127 LaSalle Street.
CHICAGO, - ILL.

HIBBARD & VANCE,

Vessel Agents

66 and 368 Broadway, MILWAUKEE, WIS
114 La Salle Street, CHICAGO, ILL.

KNEIP & MORRISON,

PROCTORS IN ADMIRALTY,
115 Monroe St Room 54 Chicago.

ROBERT RAE,

Admiralty and Insurance Law Office,

Room 37, Merchants' building, CHICAGO, ILL.

A. M. BARNUM,

Vessel Agent and Broker,

15 Exchange St. Buffalo, N. Y.

☞IF YOU DO NOT RECEIVE MY MONTHLY LIST OF VESSELS FOR SALE, SEND FOR IT.

GLOBE SHIPBUILDING CO.,

Builders of Iron and Steel Vessels of every Description.

Builders of the Iron Steamer Onoco, Yacht Twilight, and Iron Tugs International and Record.

OFFICE AND WORKS, OLD RIVER ST., CLEVELAND, O.

Established in 1830.

WM. WALL'S SONS,

—MANUFACTURERS OF—

CORDAGE & OAKUM.

Gangs of AMERICAN, RUSSIA and ITALIAN HEMP of the very best quality made to order AT ONE DAY'S NOTICE. MANILA and SISAL BINDER TWINE.

Office No. 113 WALL STREET, NEW YORK.
Factory, Brooklyn, N. Y.

JAMES P. DONALDSON & CO.,

Ship-chandlers, Sailmakers

AND DEALERS IN

Mill, Railway and Manufacturers' Supplies,

WOODWARD AVE., DETROIT, MICH.

DEAN & CO.,

BOAT BUILDERS.

Patent Yawl Boats of all Lengths, Pleasure and Hunting Boats, Sail and Steam Yachts on Hand.

Also, Life Boats that will pass Government Inspection, and cost less than any Life Boats in U.S.A.

DEAN & CO., FOOT OF ST. AUBIN-ST., DETROIT, MICH.

ROSEL DOWNER,

SUB-MARINE DIVER,

Sub-marine Drilling and Blasting.

STERN BEARINGS REPAIRED WITHOUT GOING TO DRYDOCK.

Wrecking Expeditions Accompanied.

Contracts Made for all Kinds of Diving.

Residence, 73 West Ohio St., Chicago,

WARNER & DRISCOLL, CLEVELAND AGENTS.

T. E. WILSON,

SUB-MARINE DIVER.

All Kinds of Water Work

DONE PROMPTLY TO ORDER

HEADQUARTERS,

Upson & Walton's, River Street,

Or, 137 Hermann-St, Cleveland, O.

PENFIELD BLOCK CO,

Lockport, New York, are Sole Manufacturers of the

Celebrated "Anchor Brand" Tackle Blocks,

ALL STEEL ROLLER BUSHED

OR WITH

Our Self-lubricating Phosphor Bronze Bushings.

The metal in these Bushings is the Celebrated Phosphor-Bronze, the best bearing metal in the market, and being perfect lubricators they are fast superseding all other styles. For sale by SHIP CHANDLERS everywhere.

ASK FOR "ANCHOR BRAND" TACKLE BLOCKS.

Illustrated Catalogue and price list mailed free on application. Sample orders solicited

Accompanying cut represents our new block, PATENTED NOVEMBER 13, 1883

G. S. RAND. H. B. BURGER.

RAND & BURGER

SHIP-BUILDERS,

WITH

DRY DOCK

ATTACHED TO THE WORKS.

ALSO PREPARED TO DO

WRECKING AND TOWING

WITH THE

Tug John Gregory.

Vessels Docked and Repaired on Short Notice.

MANITOWOC, WIS.

The Neversink Cork Jacket

AND IMPROVED LIFE BELTS,

Warranted Twenty-four Lbs. Buoyancy

AND FULL WEIGHT OF CORK,

According to Requirements of U. S. Inspectors.

SUPERIOR TO ALL OTHERS.

ALSO RING BUOYS.

CHEAPEST. SAFEST.

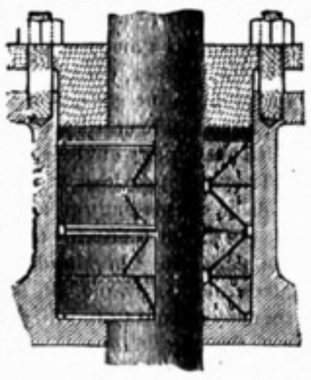
Approved and adopted by the United States Board of Supervising Inspectors; also by the principal Ocean, Lake and River Steamer Lines, as the only Reliable Life Preserver.

VESSELS AND TRADE SUPPLIED.

Send for Circulars.

D. KAHNWEILER 146, 148 & 150 Worth St
Near Center St., New York.

KATZENSTEIN'S



SELF-ACTING METAL PACKING

FOR PISTON RODS, VALVE STEMS, Etc.

Adopted and in use by the principal Iron Works and Steamship Companies within the last eight years in this and Foreign countries. For full particulars and references address

L. KATZENSTEIN & CO
169 Christopher St, near West Street N. Y.
CAPT. THOS. WILSON, Cleveland agent.

MARINE DIRECTORY

Of the Great Lakes.

R. L. POLK & CO.,

The Well-known Directory publishers, 40 Larned-st, West, Detroit, will have ready for circulation by the opening of Navigation, a Complete Guide to the MARITIME INTERESTS ON THE LAKES.

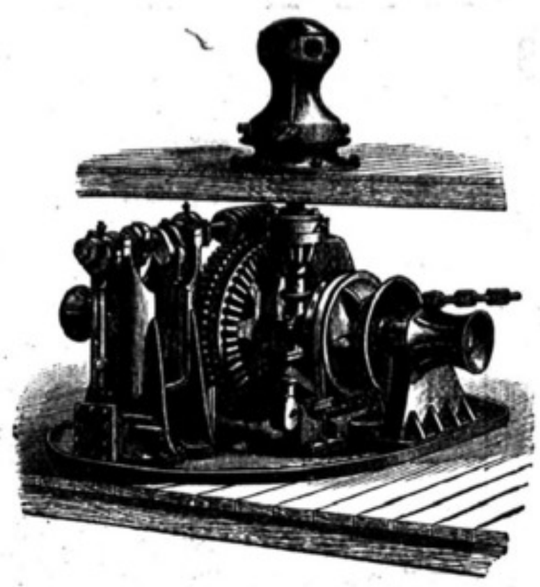
Boat washing and general laundry in a few hours. CLEVELAND STEAM LAUNDRY, 109 Water Street. Telephone 118.

AGENTS wanted for The Lives of all the Presidents of the U. S. The largest, handsomest, best book ever sold for less than twice our price. The fastest selling book in America. Immense profits to agents. All intelligent people want it. Any one can become a successful agent. Terms free. HALLETT BOOK CO., Portland, Maine

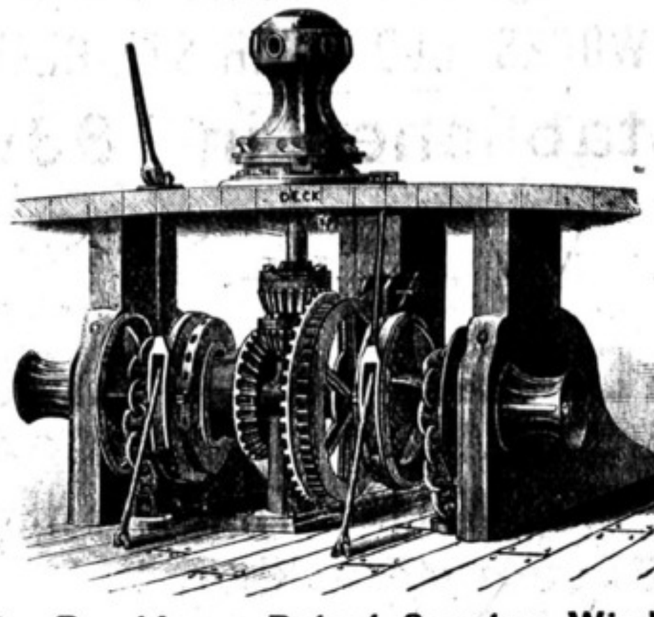
AMERICAN SHIP WINDLASS CO.,

PROVIDENCE, RHODE ISLAND,

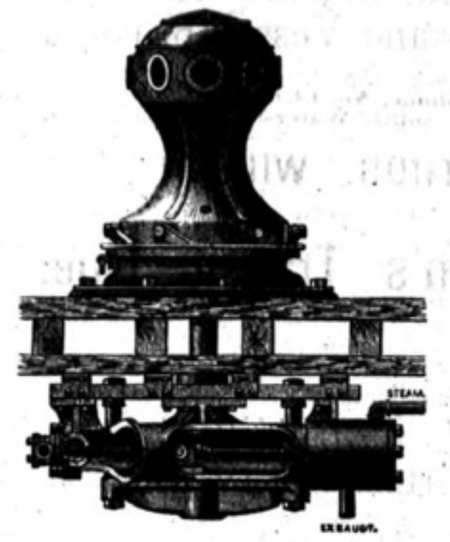
Original and only builders of the "Providence" Steam and Hand Windlasses, Steam Capstans, Crank Capstans and Power Capstans for Steam and Sailing Vessels, Yachts, Tug Boats, Wrecking Boats, Elevators, Dry Docks, Etc.



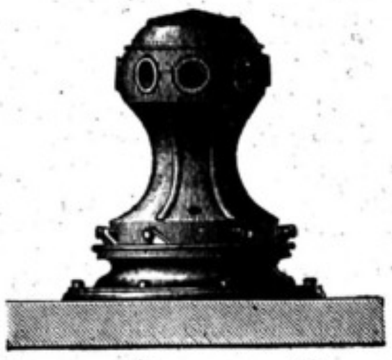
The Providence Patent Steam Capstan Windlass, New Style.



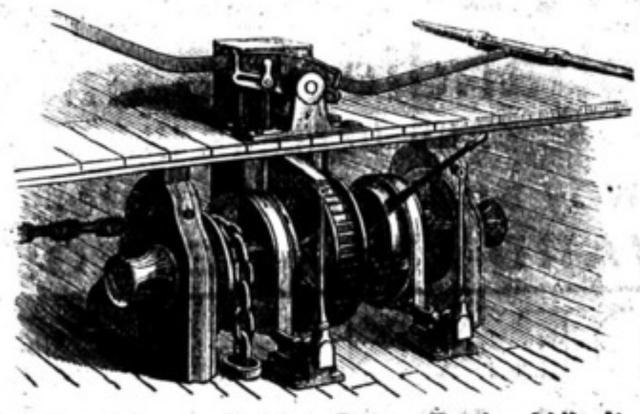
The Providence Patent Capstan Windlass.



The Providence Patent Steam Capstan.



The Providence Patent Power Capstan.



The Providence Patent Pump Brake Windlass.

The Providence Patent Crank Capstan.

SELLING AGENTS ON THE LAKES.

D. S. AUSTIN & CO.	BUFFALO, N. Y.	JAMES P. DONALDSON & CO.	DETROIT, MICH
UPSON, WALTON & CO.	CLEVELAND, O.	DUNHAM & HOIT,	CHICAGO, ILL
M. I. WILCOX,	TOLEDO, O.	G. D. NORRIS & CO.	MILWAUKEE, WIS

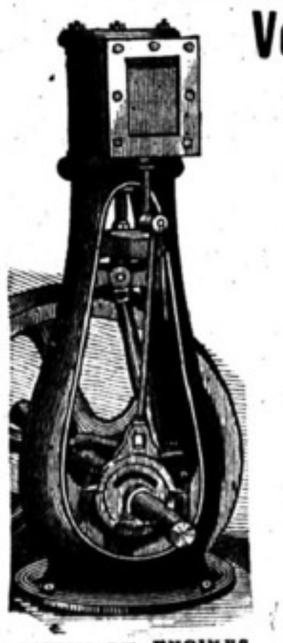
THE GLOBE IRON WORKS.

GENERAL FOUNDERS, MACHINISTS, BLACKSMITHS, BOILER MAKERS, AND IRON SHIPBUILDERS.

Office and Works, Corner of Elm and Spruce Sts., Cleveland, O.

STEAM ENGINES.

We are prepared to furnish on short notice Stationary or Marine, either High Pressure, Low Pressure, Condensing or Compound Engines, Horizontal o Vertical, with or without graduating cut off.



STATIONARY ENGINES

Vertical Engines Kept in Stock.

We keep all sizes of vertical engines in stock, which we are prepared to sell at respective prices. Stationary engine includes Governor, Throttle, Cylinder, and Oiler, Oil Cups and Waste Cocks. Marine Engine includes Link and Reverse Motion, Circular Throttle Cylinder, Oiler, Oil Cups and Waste Cocks, same as stationary,—no governor or fly wheel. Nos. 7, 8, 9 and 10, have single cranks, with separate journal when used with stationary engines.

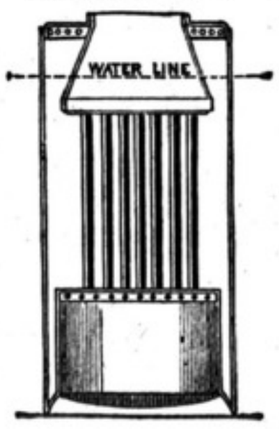
They are provided with good brass boxes in both ends of connecting rod and cross head, with best possible provision made for taking up the wear. The Cylinder, Steam Chest and lower head are cast in one piece and the frame, slides, and journals in one piece, thereby lessening liability of derangement and first cost and insuring a durable machine. The Cylinders are neatly covered with cast iron laging. Slide valve with large ports. Piston filled with good metallic packing. Material and workmanship guaranteed.

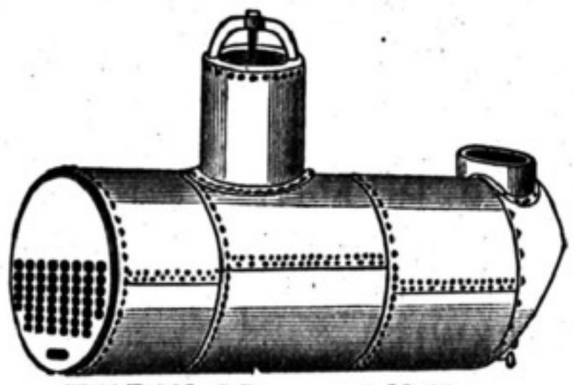
MARINE ENGINES.

BOILERS.

Having provided our new boiler works with the most approved tools for riveting by steam, planing the edges, instead of chipping, drilling, punching, shearing and bending by steam power, we feel warranted in saying we can furnish the best work for the least money in the following kinds of boilers, which we can build of either Iron or Steel: Return flue Marine Boilers, Tubular Boilers, either horizontal or vertical, Locomotive Boilers, Cylinder Boilers, Flue Boilers, Smoke Stacks and general plate Iron work.

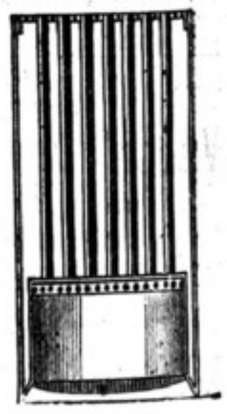
SUBMERGED TUBE



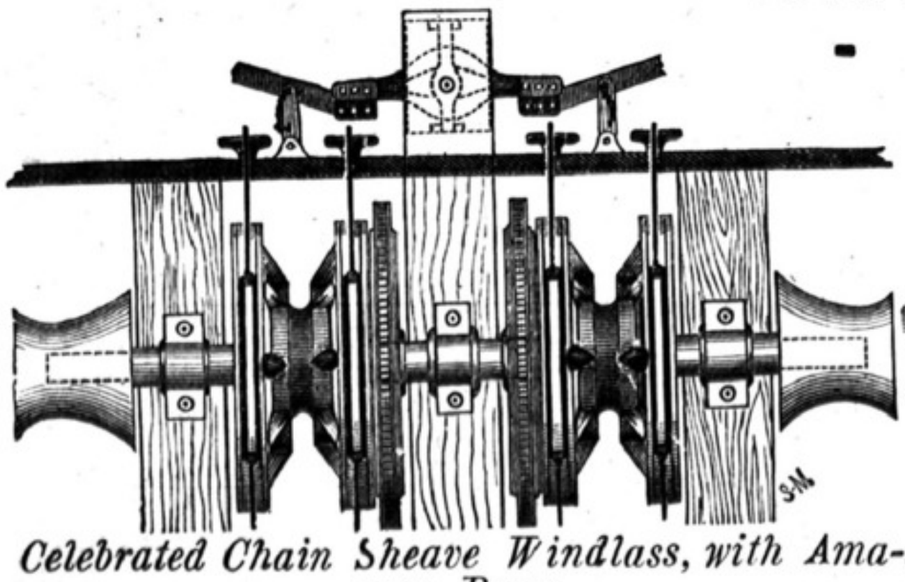


TUBULAR BOILER.

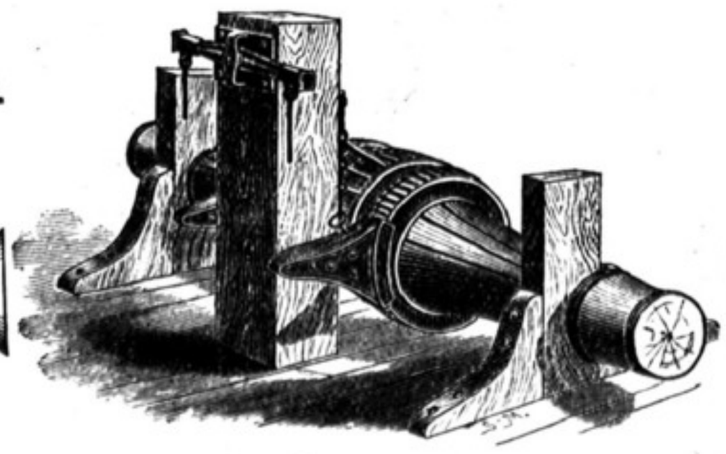
FULL TUBE BOILER.



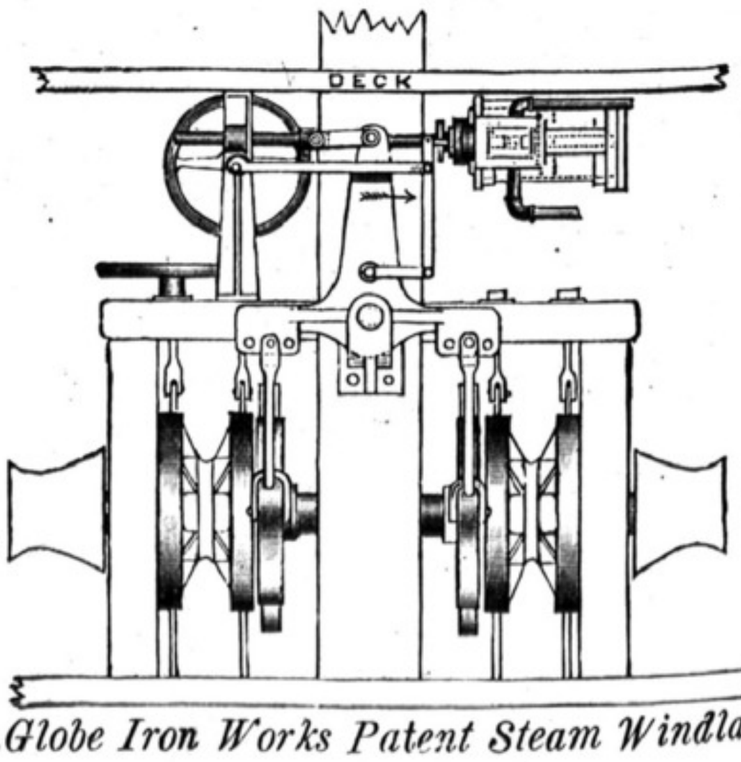
Ship Chandler's List.



Celebrated Chain Sheave Windlass, with Amazeen Beam.



The Common Patent Windlass.



Globe Iron Works Patent Steam Windlass